XR-C4100

SERVICE MANUAL

AEP Model
UK Model

Model Name Using Similar Mechanism	XR-5800R
Tape Transport Mechanism Type	MG-25G-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	20 – 18,000 Hz
Signal-to-noise ratio	58 dB (TYPE I) 61 dB (TYPE II, IV)

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	
	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.71 MHz/450kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	40 W × 4 (at 4 ohms)

General

Outputs	Power aerial relay control lead/Power amplifier control lead/Telephone ATT control lead Rear line out (1)
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 58 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X4S

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

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Flexible Circuit Board Repairing

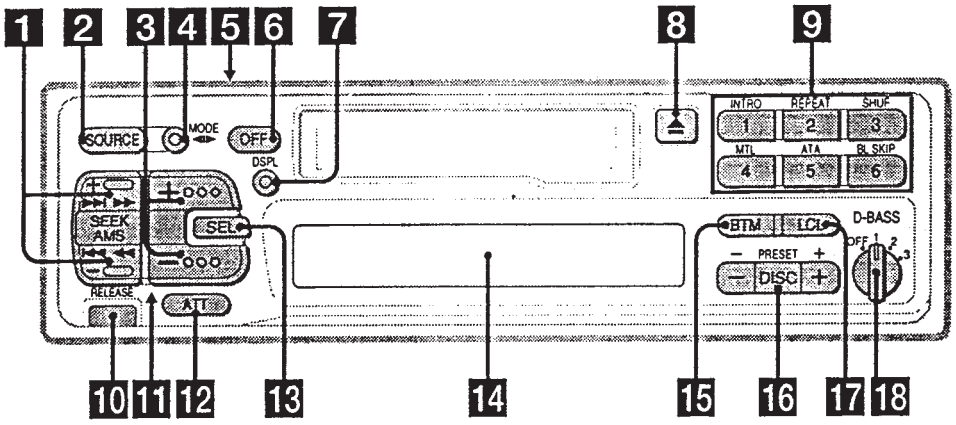
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

This section is extracted from instruction manual.

Location of controls



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Refer to the pages for further details.

1 SEEK/AMS button 5, 6, 7, 8, 10, 11

2 SOURCE button (TAPE/TUNER/MD/CD) 5, 7, 10

3 ⊕⊖ (volume/bass/treble/left-right/front-rear control) button 5, 9

4 MODE (◄I►) button
During tuner reception:
BAND select 7

During tape playback:
Transport direction change 5

During MD/CD playback:
MD/CD Unit select 10

5 POWER SELECT switch (located on the top of the unit)
See "POWER SELECT Switch" in the Installation/Connections manual.

6 OFF button 4, 5

7 DSPL (display mode change/time set) button 5, 6, 8, 10

8 ⏏ (eject) button 5

9 During radio reception:
Preset number buttons 7

During tape/MD/CD playback:
① INTRO button 6, 11
② REPEAT button 6, 11
③ SHUF (Shuffle) button 11
④ MTL (Metal) button 6
⑤ ATA (Automatic Tuner Activation) button 6
⑥ BL SKIP (Blank Skip) button 6

10 RELEASE (front panel release) button 4, 13

11 Reset button (located on the front side of the unit hidden by the front panel)
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

12 ATT button 9

13 SEL (control mode select) button 5, 9, 10

14 Display window

15 BTM (Best tuning memory) button 7

16 PRESET/DISC button
During tuner reception:
Preset stations 7

During MD/CD playback:
Disc change 11

17 LCL button 8

18 D-BASS control 9

14

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.
Press the reset button with a pointed object, such as a ballpoint pen.

Reset button

Note
Pressing the reset button will erase all the memorised programme and memory functions.

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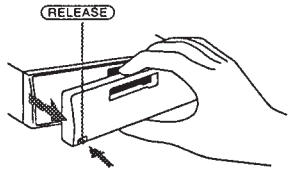
Detaching the front panel

The front panel of this unit can be detached to prevent the unit from being stolen.

1 Press (OFF).

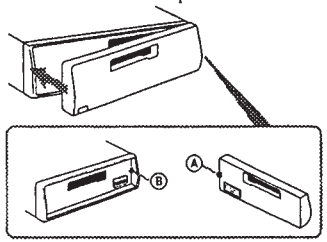
2 Press (RELEASE) to detach the front panel then gently pull it out.



Notes
- *Be sure not to drop the panel when detaching it from the unit.*
- *If you press (RELEASE) to detach the panel while the unit is still turned on, the power will automatically turn off to protect the speakers from being damaged.*

Attaching the front panel

Attach part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push until it clicks.



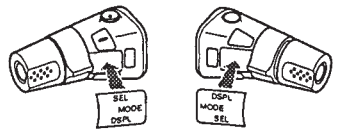
Notes
- *Make sure the front panel is right side up when attaching it to the unit as it cannot be attached upside down.*
- *Do not press the front panel too hard when attaching it to the unit. It can easily be attached by pressing it lightly against the unit.*
- *When you carry the front panel with you, keep it in the supplied front panel case.*
- *Do not press hard or put excessive pressure on the display windows of the front panel.*
- *Do not expose the front panel to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dashboard etc. of a car parked in direct sunlight where there may be a considerable rise in temperature inside the car.*

Caution alarm

If you turn the ignition key to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the Ⓐ position). If you connect an optional power amplifier to the LINE OUT, and do not use the built-in amplifier, the beep tone will be disabled.

Preparing the rotary commander

When you mount the rotary commander, attach the appropriate label, as in the illustration below.

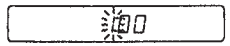


Setting the clock

The clock has a 24-hour digital indication.
For example, setting it to 10:08

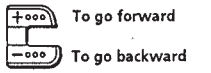
1 Press (OFF) or (DSPL) during operation.

2 Press (DSPL) for two seconds.



The hour digit flashes.

❶ Set the hour digits.



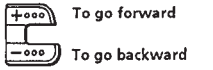
To go forward

To go backward

❷ Press (SEL) momentarily.

The minute digits flashes.

❸ Set the minute digits.



To go forward

To go backward

3 Press (DSPL) momentarily.

The clock starts.

Note
If the POWER SELECT switch on the top of the unit is set to the Ⓑ position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio.

EN

Installation

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the installation location carefully so that the unit will not interfere with driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

To detach

Press the (RELEASE) to detach the front panel then gently pull it out.

To attach

Align parts Ⓐ and Ⓑ, and push the front panel in until it clicks.

Instalación

Precauciones

- No toque los cuatro orificios de la superficie superior de la unidad. Estos orificios son para ajustes del sintonizador que solamente deberán realizar técnicos de reparación.
- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como a la luz solar directa o al aire de calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, utilice solamente la ferretería de montaje suministrada.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 20°.

Forma de extraer e instalar el panel frontal

Antes de instalar la unidad, extraiga el panel frontal.

Para extraerlo

Presione la tecla (RELEASE) para extraerlo y, a continuación, tire de él hacia fuera con suavidad.

Para instalarlo

Alinee las partes Ⓐ y Ⓑ, y presione el panel frontal hasta que chasquee.

Montering

Sökerhetsföreskrifter

- Låt de fyra hålen på bilstereons ovansida vara. De är till för radiojusteringar som endast får utföras av fackkunniga tekniker.
- Var noga när du väljer var i bilen du monterar bilstereon, så att den inte sitter i vägen när du kör.
- Montera inte bilstereon där den utsätts för värme, t ex solsken eller varmluft, eller där den utsätts för damm, smuts och/eller vibrationer.
- Använd endast de medföljande monteringstillbehören för att vara säker på att bilstereon monteras på ett säkert och korrekt sätt.

Tillåten monteringsvinkel

Monteringsvinkeln får inte vara större än 20 grader.

Ta loss/fästa frontpanelen

Ta loss frontpanelen innan du monterar bilstereon.

Ta loss frontpanelen

Tryck på (RELEASE) för att ta loss frontpanelen. Dra den sedan försiktigt utåt.

Fästa frontpanelen

Lägg Ⓐ och Ⓑ mot varandra, kant i kant, och tryck tills du hör ett klickljud.

Instalação

Precauções

- Não altere indevidamente os quatro orifícios da superfície da parte superior do aparelho. Estes servem para regulações do sintonizador que devem ser efectuadas somente por técnicos qualificados.
- Escolha cuidadosamente o local de instalação para que o aparelho não interfira com a condução.
- Evite instalar o aparelho onde possa estar sujeito a altas temperaturas, tais como em locais expostos directamente à luz do sol, ao ar quente dos aquecimentos, ou sujeitos a pó, sujidade ou vibração excessiva.
- Para efectuar uma instalação segura utilize unicamente o equipamento de montagem fornecido .

Ajuste do ângulo de montagem

Ajuste o ângulo de montagem a menos de 20°.

Para retirar e colocar o painel frontal

Retire o painel frontal antes de iniciar a instalação do aparelho.

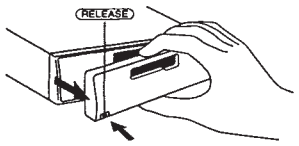
Para retirar

Carregue em (RELEASE) para soltar o painel frontal e, em seguida, puxe-o com cuidado.

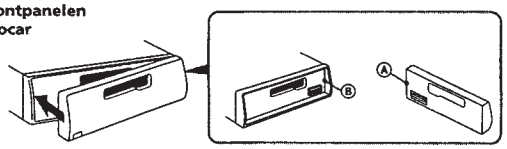
Para colocar

Alinhe as partes Ⓐ e Ⓑ, e fixe o painel frontal pressionando-o até que encaixe.

To detach
Para extraerlo
Ta loss frontpanelen
Para retirar



To attach
Para instalarlo
Fästa frontpanelen
Para colocar



Mounting Example

Installation in the dashboard

Ejemplo de montaje

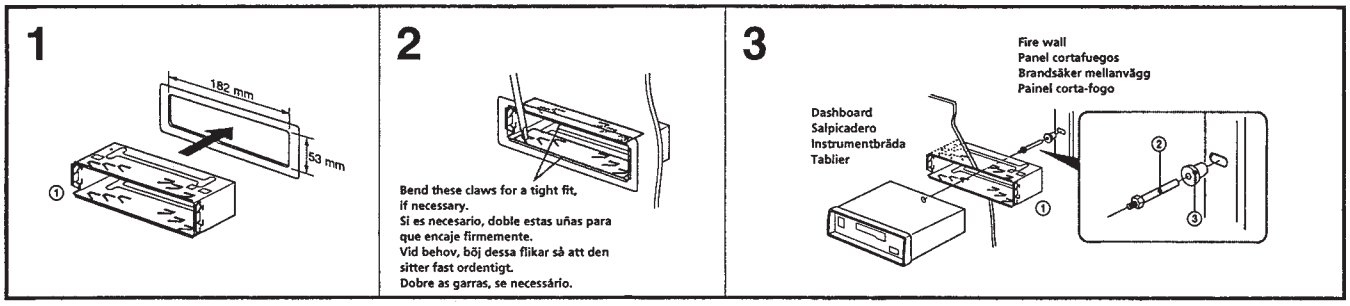
Instalación en el salpicadero

Exempel på montering

Montera på instrumentbrädan

Exemplo de montagem

Instalação no tablier



Note for Connecting

If there is alternator noise (a whining sound when raising engine speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord ⑤. Connect the ground cord to the master unit with part ② as shown in the illustration.

Nota sobre conexión

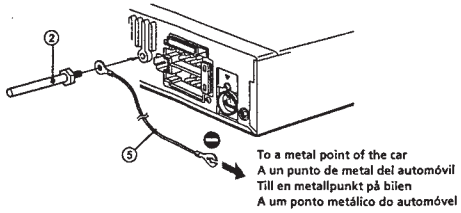
Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unidad principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis ⑤ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza ② como se muestra en la ilustración.

Angående anslutningar

Om motorn ger störningar (ett vinande ljud när du gasar) bör du jorda huvudenheten till en metallpunkt på bilen med den medföljande chassijordkabeln ⑤. Anslut jordkabeln till huvudenheten med jordkontakten ② enligt bilden.

Nota sobre a ligação

Se o alternador começar a produzir ruídos (um som agudo durante o aumento da velocidade do motor), ligue a unidade principal à terra. Para tal, ligue o cabo de terra do chassis ⑤ fornecido a um ponto metálico do automóvel. Ligue o cabo de ligação à terra ao aparelho principal com a peça ②, como se mostra na ilustração.


②
⑤
To a metal point of the car
A un punto de metal del automóvil
Till en metallpunkt på bilen
A um ponto metálico do automóvel

Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the unit to the power supply of the car after all other connections are complete.
- **Run all ground wires to a common ground point.**
- Connect pin 4 or pin 7of the unit's power connector to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in combination with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual components' fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

If Your Car has No Accessory Position on the Ignition Key Switch — POWER SELECT Switch

The illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear if **your car has no accessory position on the ignition key switch. To avoid this battery wear, set the POWER SELECT switch located on the top of the unit to the ❻ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ❻ position.

Reset Button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc.

Note on the control function

Pin 5 of the unit's power connector supplies + 12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) Function.

Memory hold connection

When pin 4 or pin 7 of the unit's power connector is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Conexiones

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Conecte la unidad al suministro de alimentación del automóvil una vez realizadas todas las conexiones.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el terminal 4 o 7 del conector de alimentación de la unidad a un circuito libre del automóvil con una potencia nominal superior a la del fusible de la unidad. Si conecta ésta en combinación con otros componentes estéreo, la potencia nominal del circuito del automóvil al que se conecte debe ser superior a la suma de la de los fusibles de los componentes individuales. Si no hay ningún circuito en el automóvil con una potencia nominal tan alta como la del fusible de la unidad, conecte ésta directamente a la batería. Si no hay circuitos en el automóvil disponibles para conectar esta unidad, conéctela a un circuito del automóvil con una potencia nominal superior a la del fusible de la unidad de forma que si dicho fusible se funde no se vean afectados otros circuitos.

Si el automóvil no dispone de posición para accesorios en la llave de encendido — Selector POWER SELECT

La iluminación del panel frontal ha sido ajustada en fábrica para que esté activada aunque la unidad no se encuentre en reproducción. Sin embargo, este ajuste puede provocar cierta descarga de la batería del automóvil **si éste no dispone de posición para accesorios en la llave de encendido.** Para evitar esto, **ponga el selector POWER SELECT, situado en la parte superior de la unidad, en la posición ❻ y, después, presione el botón de reposición.** La iluminación estará desactivada cuando la unidad no se encuentre en reproducción.

Nota

La alarma de precaución del panel frontal no se activará cuando el selector POWER SELECT se encuentre en la posición ❻.

Botón de reposición

Cuando finalice la instalación y las conexiones, cerciórese de presionar el botón de reposición con un bolígrafo, etc.

Nota sobre la función de control

El terminal 5 del conector de alimentación de la unidad suministra + 12 V CC al activar el sintonizador o la función ATA (Activación automática del sintonizador).

Conexión para protección de la memoria

Si se conecta el terminal 4 o 7 del conector de alimentación de la unidad, el circuito de memoria siempre recibirá alimentación aunque desactive la llave de encendido.

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.*
- *No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.*
- *No intente conectar los altavoces en paralelo.*
- *No conecte altavoces activos (con amplificadores incorporados) a los terminales de altavoces de la unidad. Si lo hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

Anslutning

Sökerhetsföreskrifter

- Denna bilstereo är endast avsedd för anslutning till ett negativt jordat, 12 V bilbatteri.
- Anslut enheten till strömförsörjningen sedan alla andra anslutningar gjorts.
- **Dra samtliga jordledningar till en och samma jordningspunkt.**
- Anslut pol 4 eller pol 7 i enhetens strömanslutning till en fri krets med högre märkdata än enheten. Om du ansluter denna enhet i serie med andra stereokomponenter måste den strömkrets de är anslutna till ha högre märkdata än summan av de enskilda komponenternas märkdata. Om det inte finns någon strömkrets med lika höga märkdata som enhetens ansluter du enheten direkt till bilbatteriet. Om det inte finns några bilkretsar tillgängliga för enheten ansluter du den till en bilkrets med högre märkdata än enheten så att inga andra kretsar bryts om enhetens säkring skulle gå.

Montera bilstereon i en bil vars tändlås inte har något strömläge — Omkopplaren POWER SELECT

Innan bilstereon levererades från fabriken ställdes belysningen i teckenfönstret in så att den lyser också när bilstereon inte används. Detta kan emellertid orsaka urladdning av batteriet när du använder bilstereon **i en bil, vars tändlås saknar läget ACC (strömläge). Skjut omkopplaren POWER SELECT på bilstereons översida till läge ❻, och tryck sedan på återställningsknappen** för att undvika att bilbatteriet laddas ur. Nu lyser inte längre belysningen i teckenfönstret när bilstereon inte används.

Observera

Varningssignalen, som varnar om du inte har tagit loss frontpanelen, ljuder inte när omkopplaren POWER SELECT står i läge ❻.

Nollställningsknappen

Kom ihåg att använda en penna eller något annat spetsigt föremål för att trycka på nollställningsknappen när anslutningen och monteringen är klara.

Att observera angående kontrollfunktionen

Pol 5 i enhetens strömanslutning ger + 12 V likström när du slår på radion eller aktiverar någon av funktionerna ATA (Automatic Tuner Activation).

Anslutning för minnesstöd

När pol 4 eller pol 7 i enhetens strömanslutning är ansluten förses minneskretsen alltid med ström, även när tändningen slås av.

Att observera angående högtalarnas anslutning

- *Slå av bilstereon innan du ansluter högtalarna.*
- *Anslut endast högtalare, vars impedans varierar från 4 till 8 ohm och som har tillräcklig effekthanteringskapacitet för att skydda högtalarna mot skador.*
- *Anslut inte något av högtalaruttagen till bilens chassi. Anslut inte heller uttagen på höger högtalare till uttagen på vänster högtalare.*
- *Anslut inte högtalarna parallellt.*
- *Anslut inte aktiva högtalare (med inbyggda slutsteg) till bilstereons högtalaruttag, eftersom de kan skada de aktiva högtalarna. Var noga med att bara ansluta passiva högtalare till dessa uttag.*

Connexions

Advertência

- Este aparelho foi projectado para funcionar somente com corrente contínua de 12 V com negativo à massa.
- Ligue o aparelho à fonte de alimentação do automóvel depois de completar todas as outras ligações.
- **Ligue todos os fios de terra num ponto de massa comum.**
- Ligue o pino 4 ou o pino 7 do conector de alimentação do aparelho a um circuito livre do automóvel com uma capacidade superior à do fusível do aparelho. Se ligar este aparelho em série com outros componentes estéreo, o circuito do automóvel a que estiverem ligados deve ter uma capacidade superior à da soma dos fusíveis dos componentes individuais. Se nenhum circuito do automóvel tiver uma capacidade tão elevada como a do fusível do aparelho, ligue-o directamente à bateria. Se nenhum circuito do automóvel estiver disponível para ligação deste aparelho, ligue-o a um circuito do automóvel que tenha uma capacidade superior à do fusível do aparelho, de tal modo que, se o fusível rebentar, nenhum outro circuito seja afectado.

Se o seu automóvel não estiver equipado com uma chave de ignição com posição acessórios — Interruptor POWER SELECT

A iluminação do painel frontal é regulada na fábrica para se manter acesa, mesmo quando o aparelho não estiver ligado. No entanto, esta regulação pode provocar a descarga da bateria **se o aparelho for utilizado em automóveis sem chave de ignição com posição acessórios.** Para evitar a descarga da bateria, **regule o interruptor POWER SELECT, situado na parte superior do aparelho, para a posição ❻. Em seguida, carregue no botão de reinicialização.** A iluminação é regulada para ficar apagada enquanto o aparelho estiver desligado.

Nota

O alarme de advertência do painel frontal não é activado se o interruptor POWER SELECT estiver regulado para a posição ❻.

Botão de reinicialização

Quando terminar a instalação e as ligações, não se esqueça de carregar no botão de reinicialização com a ponta de uma caneta, etc.

Nota sobre a função do controlo

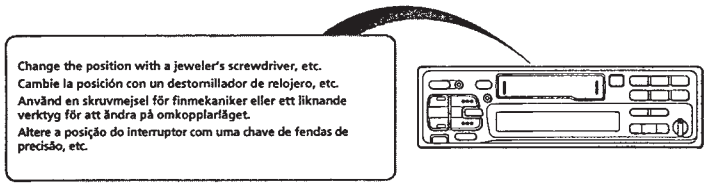
O pino 5 do conector de alimentação do aparelho fornece + 12 V CC quando se liga o sintonizador ou se activa a função ATA (Activação automática do sintonizador).

Ligação para alimentação contínua da memória

Quando está ligado o pino 4 ou o pino 7 do conector de alimentação do aparelho, o circuito da memória recebe sempre alimentação, mesmo que não rode a chave da ignição.

Notas sobre a ligação dos altifalantes

- *Antes de ligar os altifalantes, desligue o aparelho.*
- *Utilize altifalantes com impedância de 4 a 8 ohm, e com potência máxima admissível adequada. Caso contrário, os altifalantes poderão sofrer avarias.*
- *Não ligue os terminais do sistema de altifalantes ao chassis do automóvel, e não ligue os terminais do altifalante direito aos terminais do altifalante esquerdo.*
- *Não tente ligar os altifalantes em paralelo.*
- *Não ligue nenhum sistema de altifalantes activos (com amplificadores incorporados) aos terminais dos altifalantes do aparelho. Caso o faça, poderá avariar o sistema de altifalantes activos. Portanto, ligue apenas altifalantes passivos a estes terminais.*


Change the position with a jeweler's screwdriver, etc.
Cambie la posición con un destornillador de relojero, etc.
Använd en skruvmejsel för finmekaniker eller ett liknande verktyg för att ändra på omkopplarläget.
Altere a posição do interruptor com uma chave de fendas de precisão, etc.

Power Connection

Power connectors may vary depending on the car. Check your car's power connector diagram to make sure the connections match correctly. There are two basic types. You may need to switch the positions of the jump connector. Before connecting the unit to the car's power supply, be sure to match the position of the jump connector to the car's pin order. If the power connector of your car does not match the connector on the unit, use the supplied connector ⑦. If you have any questions or problems connecting your unit that are not covered in this manual, please consult the car dealer.

WARNING

Jump connector

Check the pin position of the power connector of the car with the table on the right. If positions 4 and 7 are reversed, remove the jump connector and shift it to the rightmost position as shown in the illustration.

Conexión de alimentación

Los conectores de alimentación pueden variar en función del automóvil. Consulte el diagrama del conector de alimentación del automóvil para comprobar que las conexiones coinciden correctamente. Existen dos tipos básicos. Es posible que sea necesario cambiar las posiciones del conector de empalme. Antes de conectar la unidad al suministro de alimentación del automóvil, asegúrese de que la posición del conector de empalme coincide con el orden de terminales de dicho automóvil. Si el conector de alimentación del automóvil no coincide con el de la unidad, emplee el conector ⑦ suministrado. Si desea realizar alguna consulta o solucionar algún problema referentes a la conexión de la unidad que no aparezcan en este manual, póngase en contacto con el concesionario automovilístico.

ADVERTENCIA

Conector de empalme

Compruebe la posición de terminal del conector de alimentación del automóvil con la tabla de la derecha. Si las posiciones 4 y 7 se invierten, retire el conector de empalme y desplácelo hasta la posición del extremo derecho como se muestra en la ilustración.

Strömanslutningsschema

Strömanslutningarna kan variera beroende på vilken bil du har. Kontrollera bilens diagram över strömanslutningar för att kontrollera att anslutningarna passar ihop. Det finns två huvudtyper. Du kan behöva ändra positionerna på överkopplingen. Innan du ansluter enheten till bilens strömförsörjning bör du kontrollera att överkopplingens placering överensstämmer med bilens polordning. Om din bils strömanslutningar inte överenstämmer med anslutningen på enheten använder du den medföljande kontakten ⑦. Om du har några frågor eller problem när det gäller anslutningen av enheten som inte tas upp i denna bruksanvisning kan du kontakta bilåterförsäljaren.

VARNING

Överkoppling

Jämför bilens strömanslutning med tabellen till höger. Om positionerna 4 och 7 är omkastade tar du bort överkopplingen och flyttar den till positionen längst till höger.

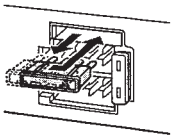
Diagrama de ligação à corrente

Os conectores de alimentação podem variar de automóvel para automóvel. Verifique o diagrama do conector de alimentação do seu automóvel, para ter a certeza de que a correspondência das ligações está correcta. Há dois tipos básicos. Pode ter que trocar as posições do conector de cavalete. Antes de ligar o aparelho à fonte de alimentação do automóvel, não se esqueça de fazer a correspondência entre a posição do conector jumper e a ordem dos pinos do automóvel. Se o conector de alimentação do seu automóvel não corresponder ao conector do aparelho, utilize o conector ⑦ fornecido. Se tiver dúvidas ou problemas ao ligar o aparelho que não estejam referidos neste manual, consulte o vendedor do automóvel.

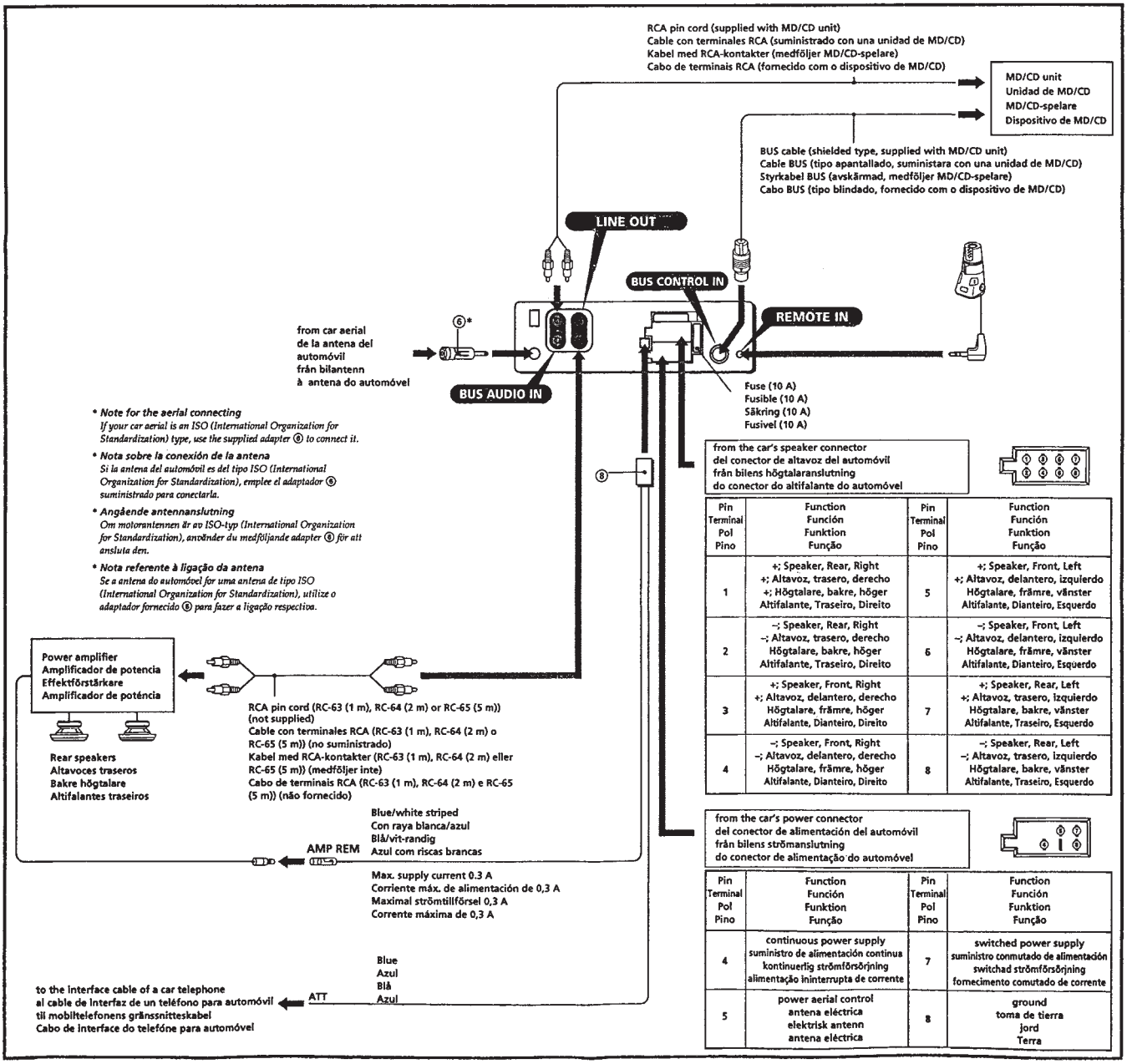
AVISO

Conector de cavalete

Verifique a posição dos pinos do conector de alimentação do automóvel na tabela à direita. Se as posições 4 e 7 estiverem invertidas, remova o conector jump e mude-o para a posição mais à direita, tal como se mostra na ilustração.



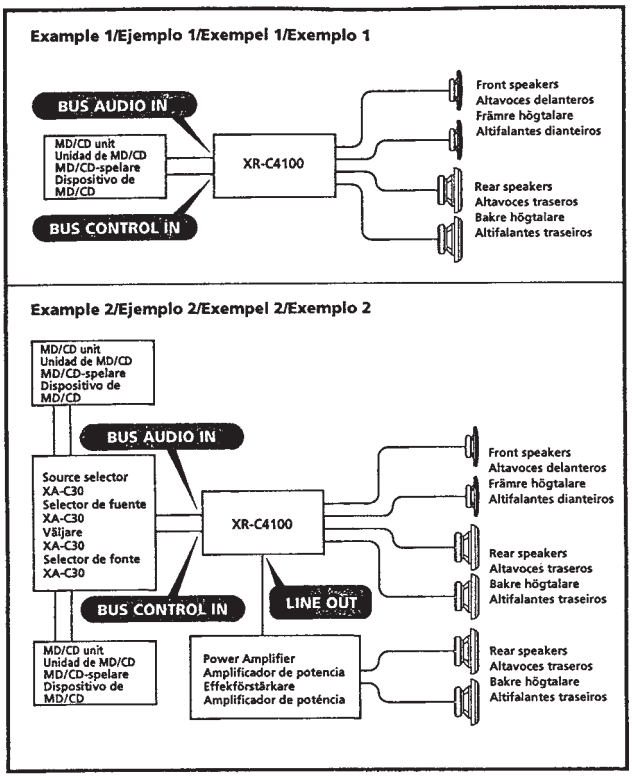
Connection example / Ejemplo de conexiones / Anslutningarna enligt exemplet / Exemplo de ligações


RCA pin cord (supplied with MD/CD unit)
Cable con terminales RCA (suministrado con una unidad de MD/CD)
Kabel med RCA-kontakter (medföljer MD/CD-spelare)
Cabo de terminais RCA (fornecido com o dispositivo de MD/CD)
MD/CD unit
Unidad de MD/CD
MD/CD-spelare
Dispositivo de MD/CD
BUS cable (shielded type, supplied with MD/CD unit)
Cable BUS (tipo apantallado, suministara con una unidad de MD/CD)
Styrkabel BUS (avskärmad, medföljer MD/CD-spelare)
Cabo BUS (tipo blindado, fornecido com o dispositivo de MD/CD)
LINE OUT
BUS CONTROL IN
REMOTE IN
BUS AUDIO IN
from car aerial
de la antena del automóvil
från bilantenn
à antena do automóvel
⑥*
Fuse (10 A)
Fusible (10 A)
Säkring (10 A)
Fusível (10 A)
* Note for the aerial connecting
If your car aerial is an ISO (International Organization for Standardization) type, use the supplied adapter ⑧ to connect it.
* Nota sobre la conexión de la antena
Si la antena del automóvil es del tipo ISO (International Organization for Standardization), emplee el adaptador ⑧ suministrado para conectarla.
* Angående antennanslutning
Om motorantennen är av ISO-typ (International Organization for Standardization), använder du medföljande adapter ⑧ för att ansluta den.
* Nota referente à ligação da antena
Se a antena do automóvel for uma antena de tipo ISO (International Organization for Standardization), utilize o adaptador fornecido ⑧ para fazer a ligação respectiva.
⑧
Power amplifier
Amplificador de potencia
Effektförstärkare
Amplificador de potência
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cable con terminales RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (no suministrado)
Kabel med RCA-kontakter (RC-63 (1 m), RC-64 (2 m) eller RC-65 (5 m)) (medföljer inte)
Cabo de terminais RCA (RC-63 (1 m), RC-64 (2 m) e RC-65 (5 m)) (não fornecido)
Rear speakers
Altavoces traseros
Bakre högtalare
Altifalantes traseiros
Blue/white striped
Con raya blanca/azul
Blå/vit-randig
Azul com riscas brancas
AMP REM
Max. supply current 0.3 A
Corriente máx. de alimentación de 0,3 A
Maximal strömtillförsel 0,3 A
Corrente máxima de 0,3 A
Blue
Azul
Blå
Azul
ATT
to the interface cable of a car telephone
al cable de interfaz de un teléfono para automóvil
til mobiltelefonens gränssnitteskabel
Cabo de interface do telefone para automóvel
from the car's speaker connector
del conector de altavoz del automóvil
från bilens högtalaranslutning
do conector do altifalante do automóvel
from the car's power connector
del conector de alimentación del automóvil
från bilens strömanslutning
do conector de alimentação do automóvel

Pin Terminal Pol Pino	Function Función Funktion Função	Pin Terminal Pol Pino	Function Función Funktion Função
1	+; Speaker, Rear, Right +; Altavoz, trasero, derecho +; Högtalare, bakre, höger Altifalante, Traseiro, Direito	5	+; Speaker, Front, Left +; Altavoz, delantero, izquierdo Högtalare, främre, vänster Altifalante, Dianteiro, Esquerdo
2	–; Speaker, Rear, Right –; Altavoz, trasero, derecho Högtalare, bakre, höger Altifalante, Traseiro, Direito	6	–; Speaker, Front, Left –; Altavoz, delantero, izquierdo Högtalare, främre, vänster Altifalante, Dianteiro, Esquerdo
3	+; Speaker, Front, Right +; Altavoz, delantero, derecho Högtalare, främre, höger Altifalante, Dianteiro, Direito	7	+; Speaker, Rear, Left +; Altavoz, trasero, izquierdo Högtalare, bakre, vänster Altifalante, Traseiro, Esquerdo
4	–; Speaker, Front, Right –; Altavoz, delantero, derecho Högtalare, främre, höger Altifalante, Dianteiro, Direito	8	–; Speaker, Rear, Left –; Altavoz, trasero, izquierdo Högtalare, bakre, vänster Altifalante, Traseiro, Esquerdo

Pin Terminal Pol Pino	Function Función Funktion Função	Pin Terminal Pol Pino	Function Función Funktion Função
4	continuous power supply suministro de alimentación continua kontinuerlig strömförsörjning alimentação ininterrupta de corrente	7	switched power supply suministro conmutado de alimentación switchad strömförsörjning fornecimento comutado de corrente
5	power aerial control antena eléctrica elektrisk antenn antena eléctrica	8	ground toma de tierra jord Terra

Connection Diagram
Diagrama de conexiones
Kopplingsschema
Diagrama de ligações



Note
If you connect an optional power amplifier to the LINE OUT and do not use the built-in amplifier, the beep-tone will be disabled.

Nota
Si conecta un amplificador opcional de potencia a LINE OUT y no utiliza el incorporado, los pitidos se desactivarán.

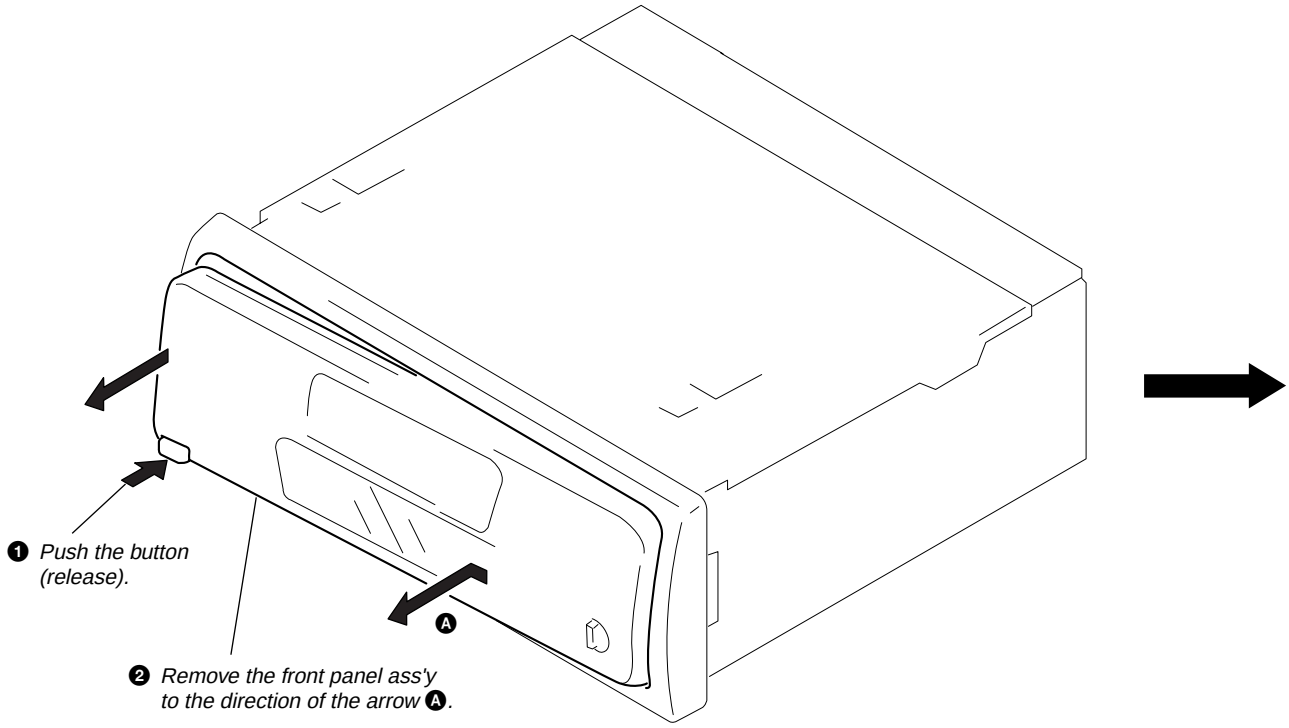
Observera
Varningssignalen avaktiveras om du inte använder den inbyggda förstärkaren, utan ansluter en annan förstärkare (tillval) till LINE OUT.

Nota
Se ligar um amplificador de potência opcional a LINE OUT e não utilizar o amplificador incorporado, o sinal sonoro será desactivado.

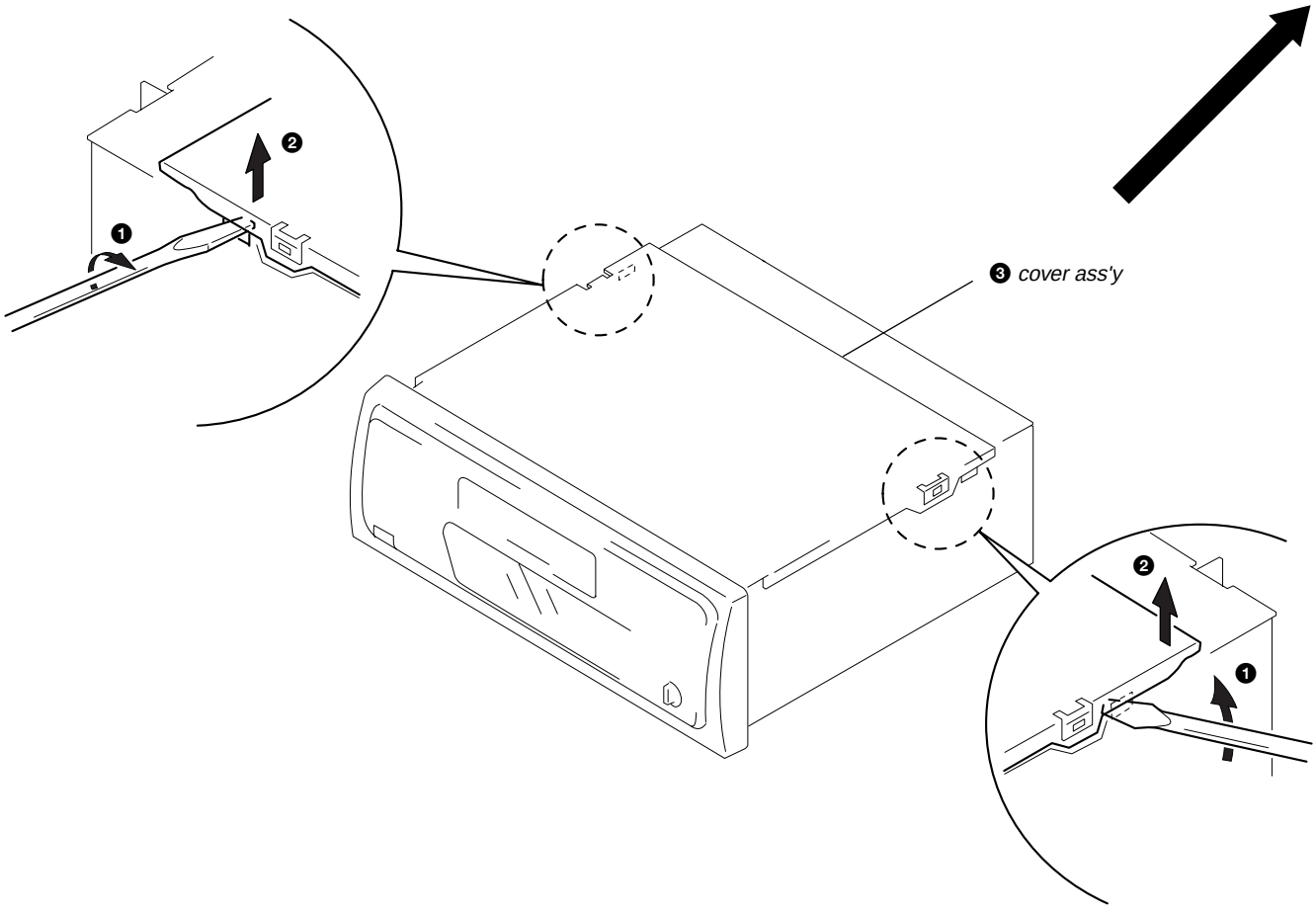
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

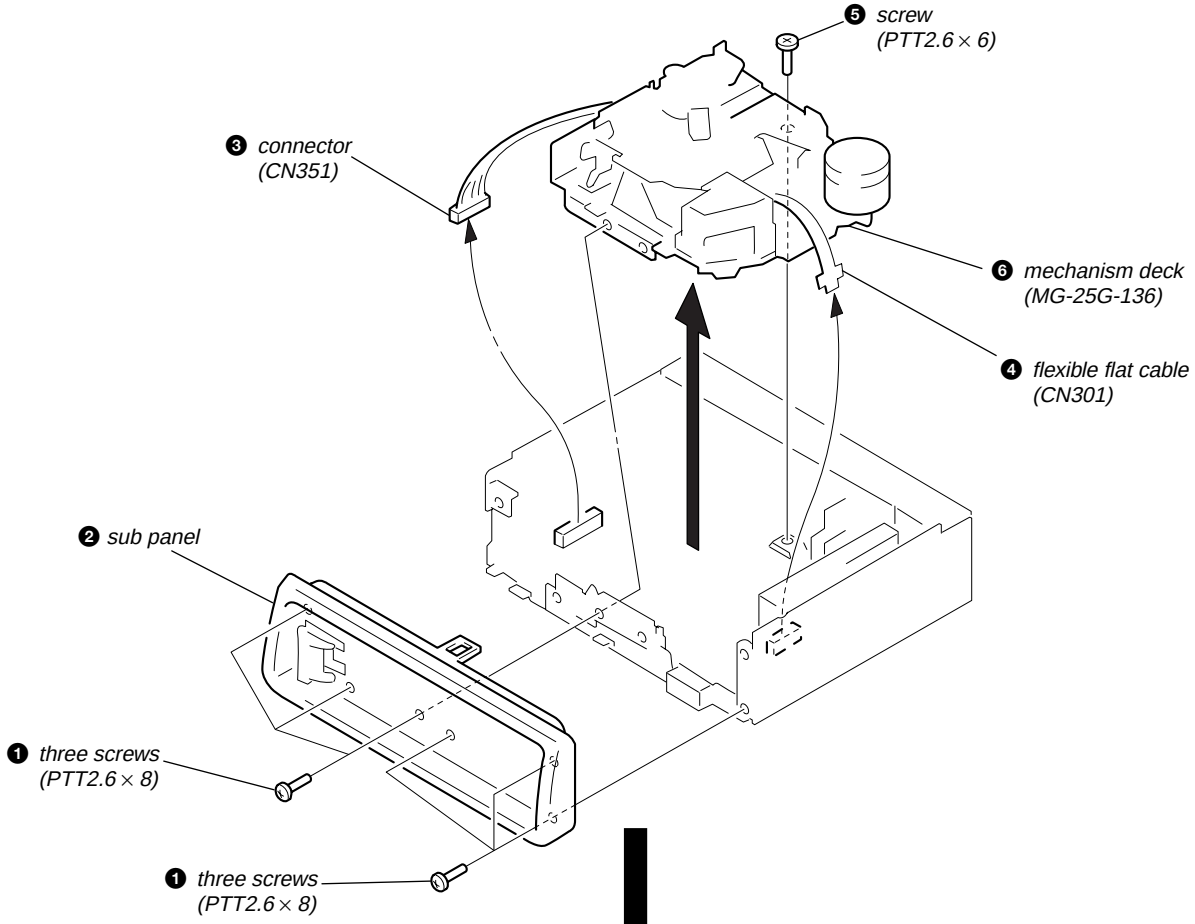
FRONT PANEL ASS'Y



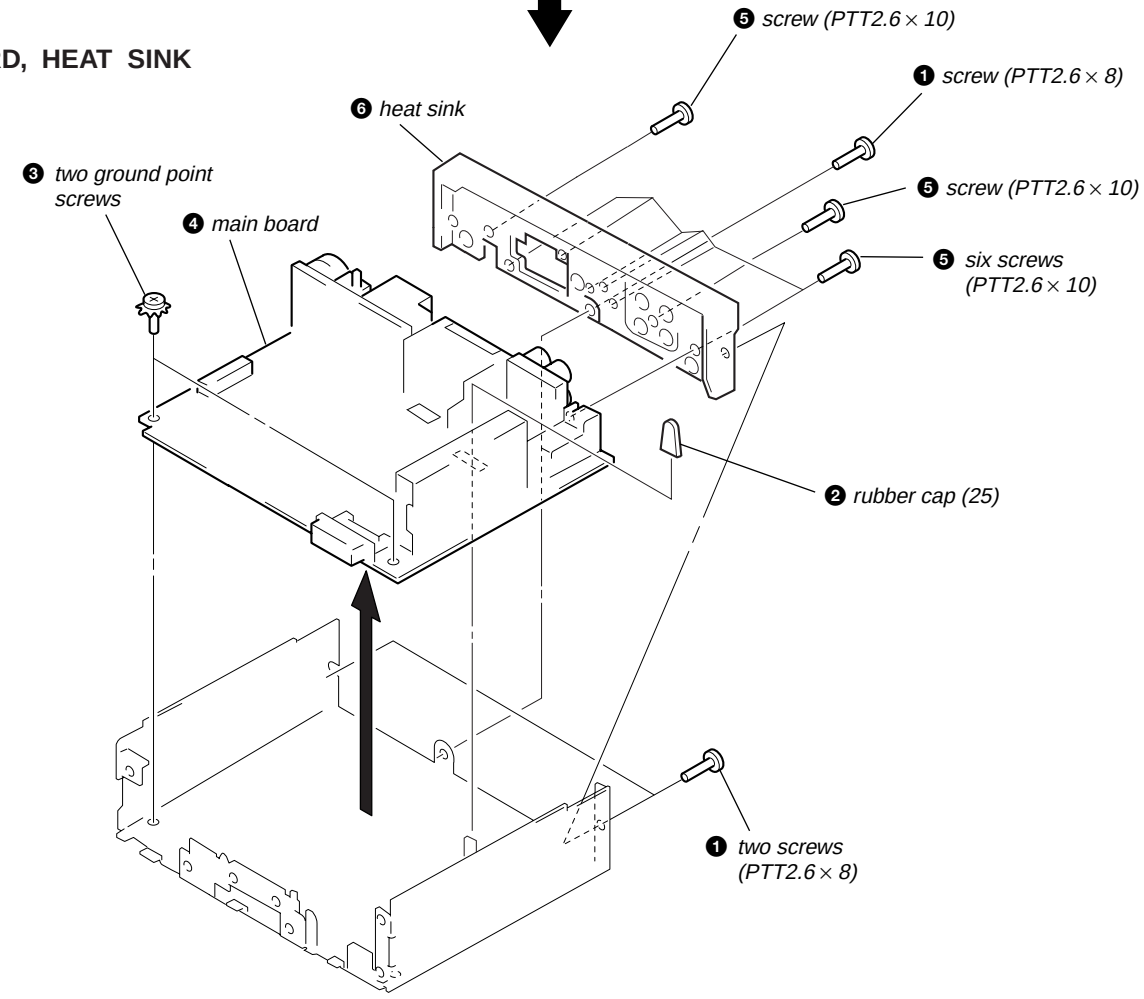
COVER ASS'Y



SUB PANEL, MECHANISM DECK (MG-25G-136)



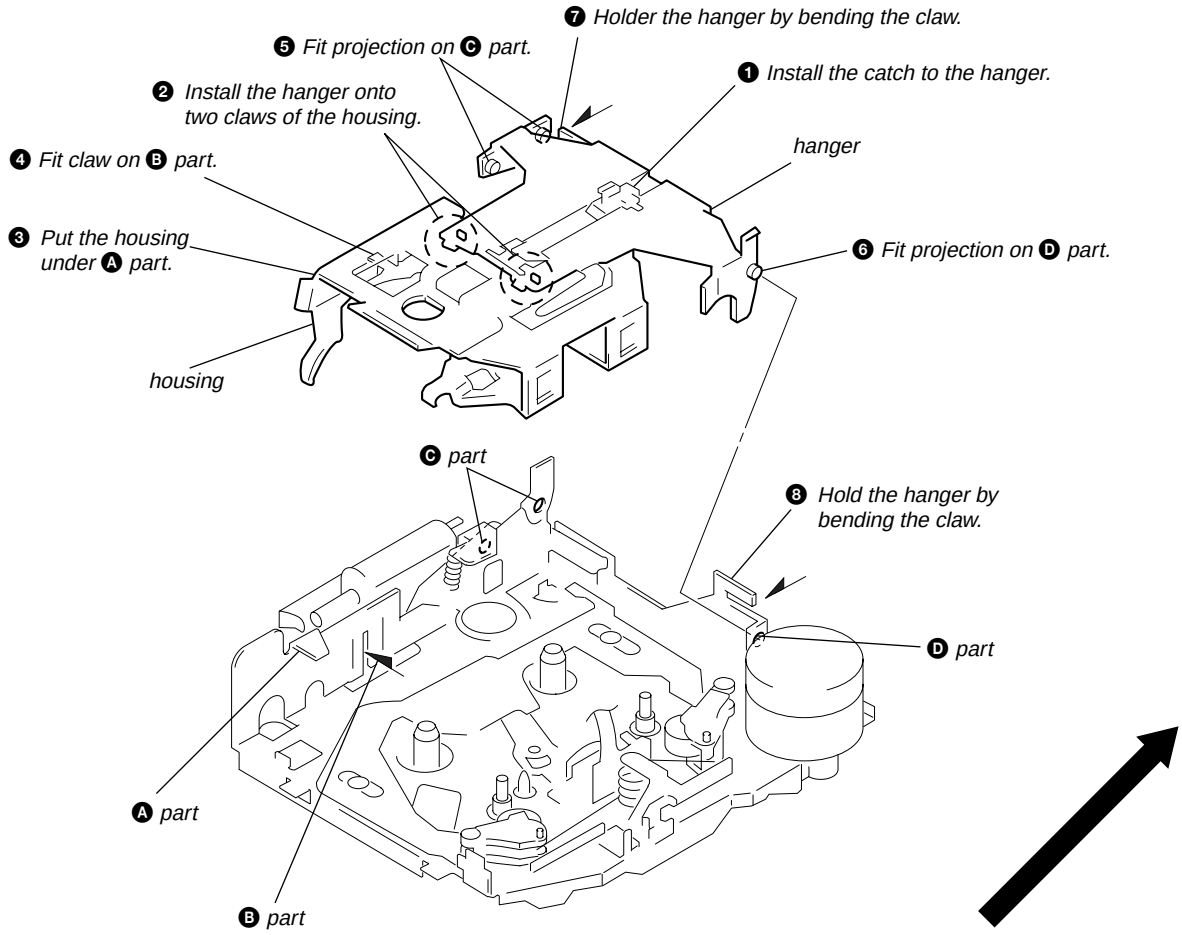
MAIN BOARD, HEAT SINK



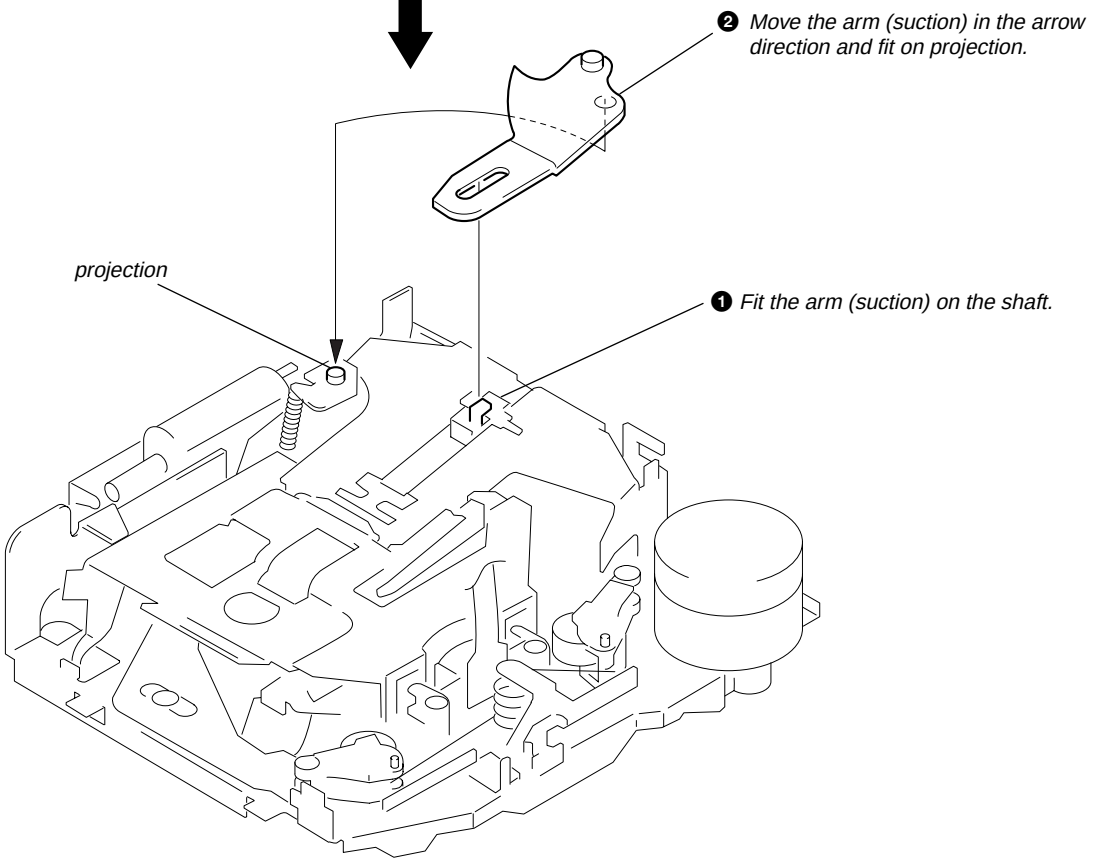
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

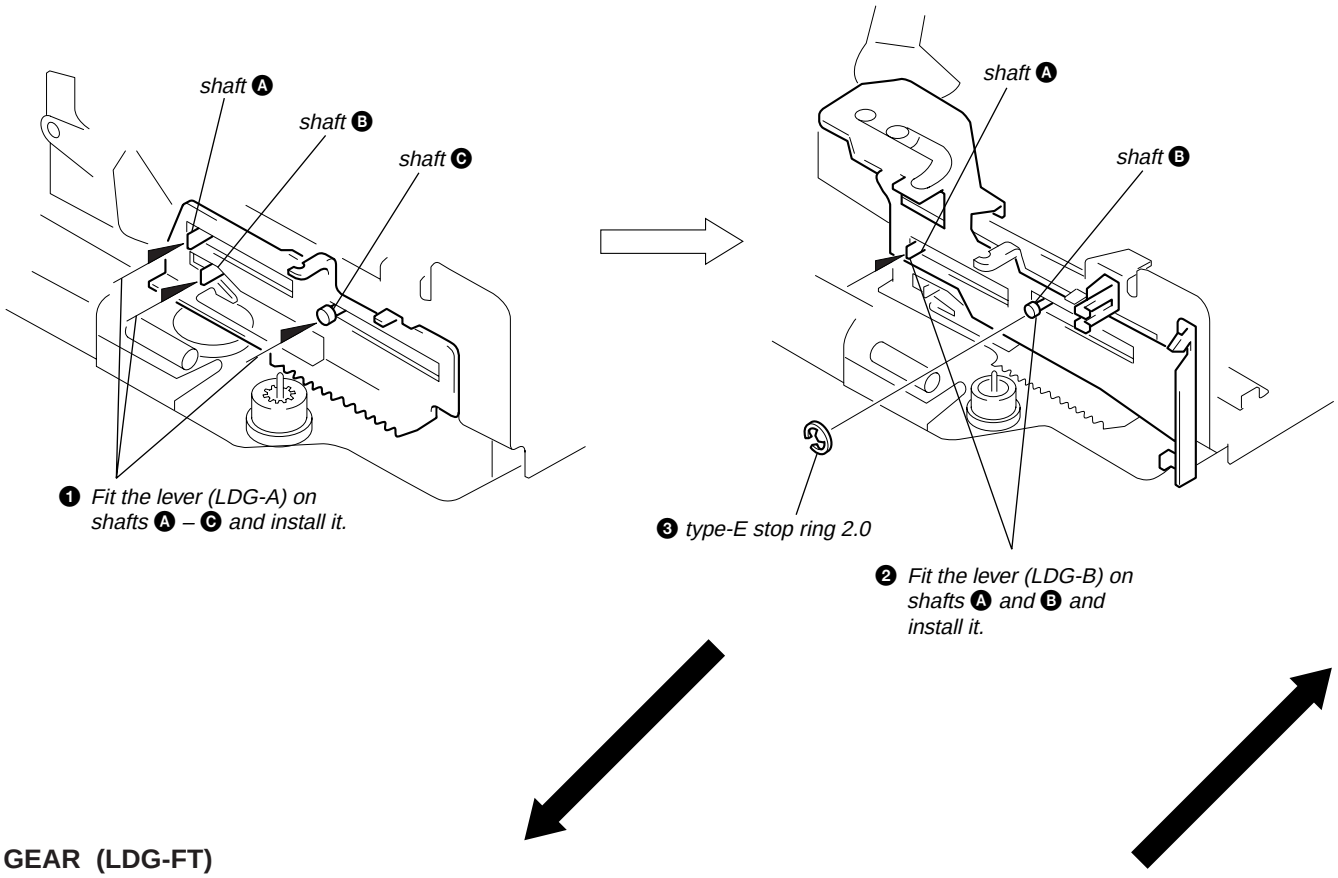
HOUSING


❼ Holder the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catch to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

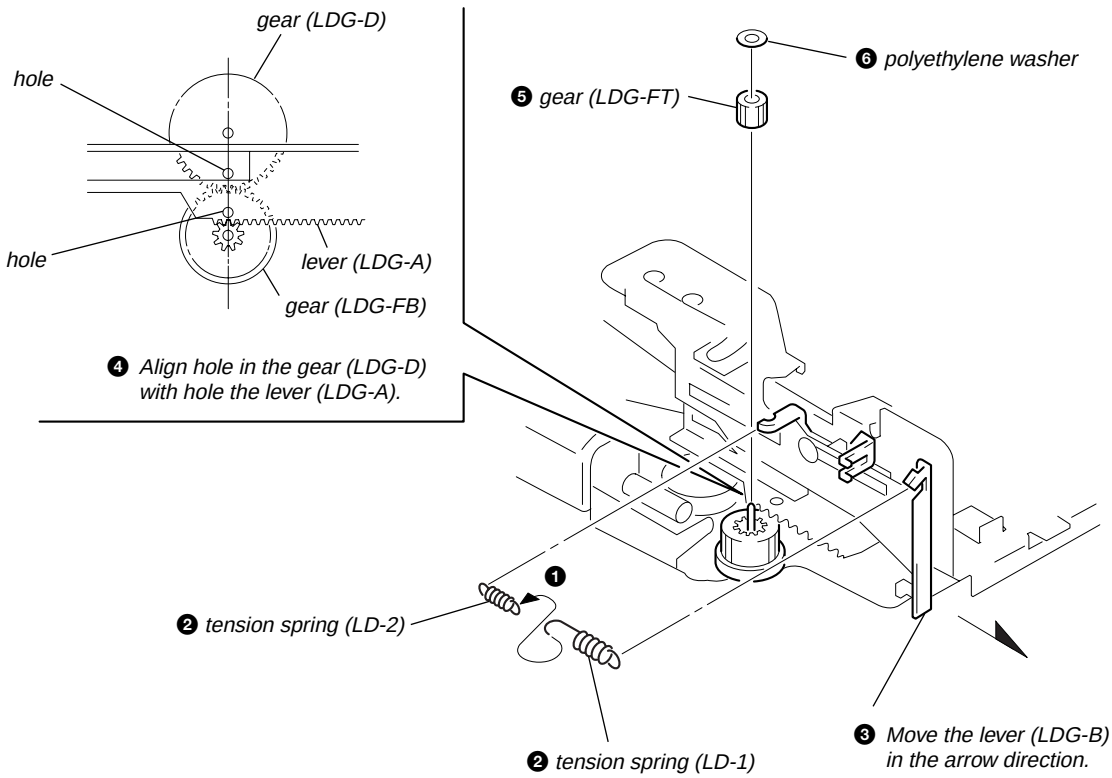
ARM (SUCTION)



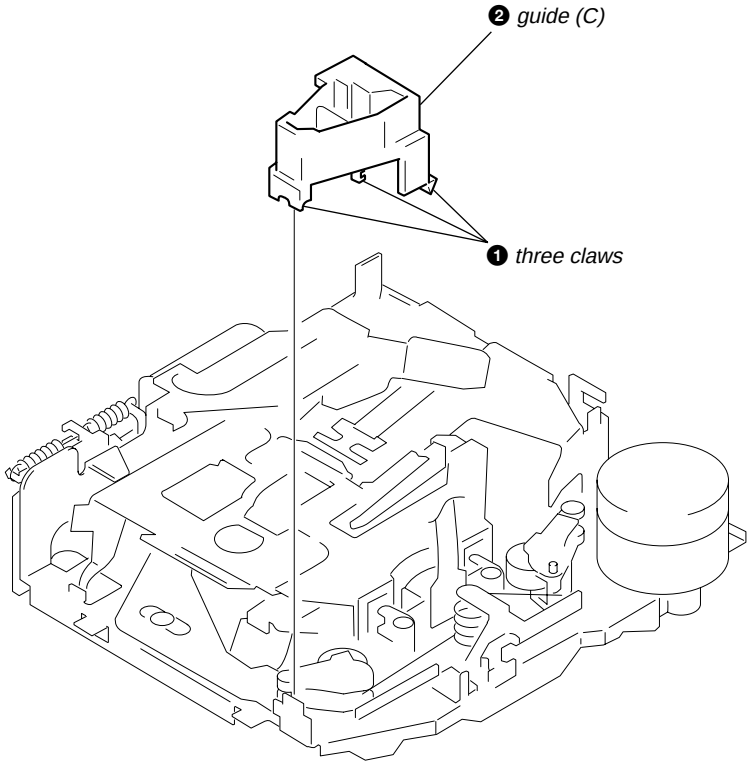
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

GEAR (LDG-FT)



GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head, pinch roller, rubber belt, capstan, idler
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
Reverse	CQ-102RC	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Reverse Back Tension	CQ-102RC	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
FF, REW	CQ-201B	60 - 200 g•cm (0.83 - 2.78 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>
1. Set the "power select" switch (S801) is "A" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
5. Press the preset [1] button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

<Release the Test mode>
1. Push the [OFF] button.
2. Return the "power select" switch (S801) to initially set position.

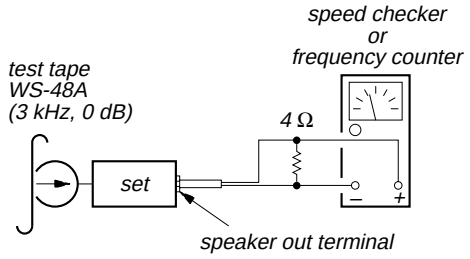
See the adjustment location from on page 17 for the adjustment.

TAPE DECK SECTION

0 dB=0.775 V

Tape Speed Adjustment

Setting:



Procedure:
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

Specification: Constant speed

Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075 Hz

Adjustment Location: See page 17.

TUNER SECTION

0 dB=1 µV

Cautions during repair
When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

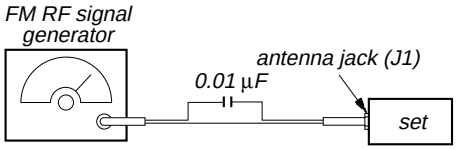
Note: Adjust the tuner section in the sequence shown below.

1. FM Auto Scan/Stop Level Adjustment.
2. FM Noise Focus Adjustment.
3. FM Stereo Separation Adjustment.
4. AM (MW) Auto Scan/Stop Level Adjustment.

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button: FM

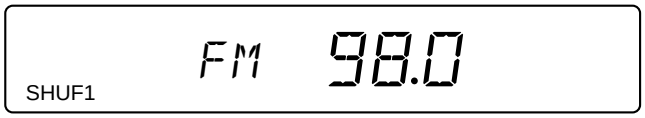


Carrier frequency : 98.0 MHz
Output level : 22 dB (12.6 µV)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)

Procedure:

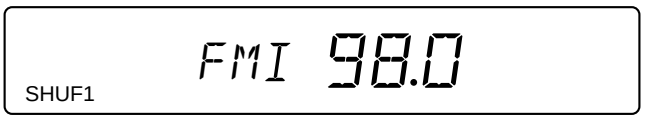
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.

Display



3. Adjust with the volume RV2 on TU1 so that the "FM" indication turns to "FMI" indication on the display window.
   But, in case of already indicated "FMI", turn the RV2 so that put out light "I" indication and adjustment.

Display

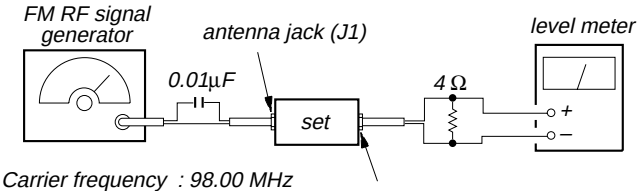


Adjustment Location: See page 17.

FM Noise Focus Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98.00 MHz
Output level : 60 dB (1 mV)
Mode : stereo
Modulation : 1 kHz, 75 kHz deviation (100%)

Procedure:

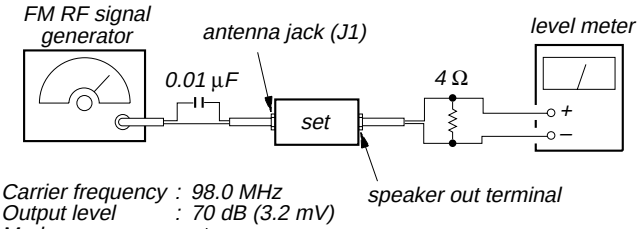
1. Tune the 98.00 MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (A) –32 ±2 dB then signal generator input set to –20 dB.

Adjustment Location: See page 17.

FM Stereo Separation Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98.0 MHz
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main: 1 kHz, 20 kHz deviation (22.6%)
sub: 1 kHz, 20 kHz deviation (22.6%)
19 kHz pilot: 7.5 kHz deviation (10%)

Procedure:

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation: Ⓐ-Ⓑ
R-CH Stereo separation: Ⓒ-Ⓓ
The separations of both channels should be equal.

Specification: Separation more than 28 dB

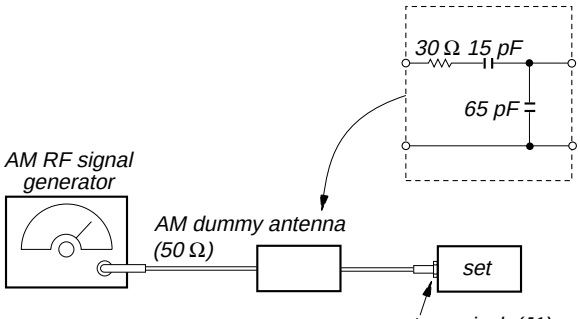
Adjustment Location: See page 17.

AM (MW) Auto Scan/Stop Level Adjustment

Make this adjustment after "FM Auto Scan/Stop Level Adjustment".

Setting:

SOURCE and MODE button: MW

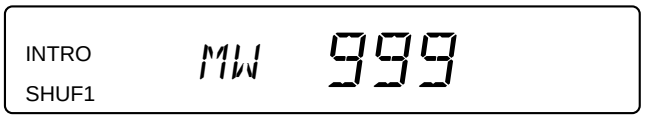


Carrier frequency : 999 kHz
30% amplitude modulation by 1 kHz signal
Output level : 33 dB (44.7 μV)

Procedure:

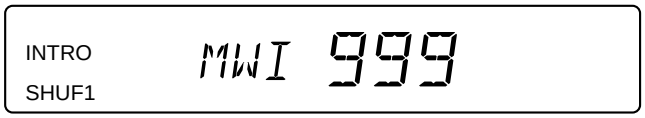
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.
3. Push the MODE button and set to MW.

Display



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MWI" indication on the display window. But, in case of already indicated "MWI", turn the RV1 so that put out light "I" indication and adjustment.

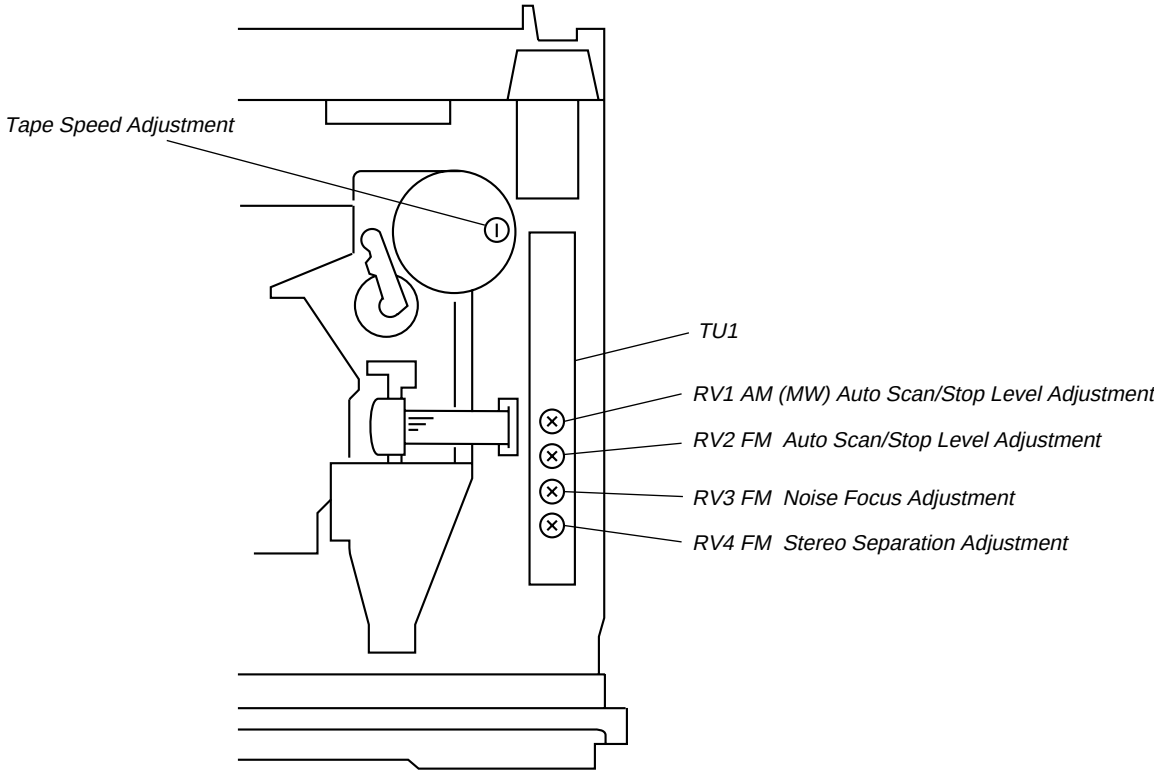
Display



Adjustment Location: See page 17.

Adjustment Location:

—SET UPPER VIEW–


Tape Speed Adjustment
TU1
RV1 AM (MW) Auto Scan/Stop Level Adjustment
RV2 FM Auto Scan/Stop Level Adjustment
RV3 FM Noise Focus Adjustment
RV4 FM Stereo Separation Adjustment

SECTION 6
DIAGRAMS

6-1. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 μPD17708GC-567-3B9 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	AMSSEL	I	Setting terminal for the AMS selection fixed at "L"
2	POS3	I	Tape position detect input from tape operation switch on the mechanism block
3	POS2	I	
4	POS0	I	
5	POS1	I	
6	TAPEON	O	Tape system power supply on/off control signal output terminal "H": tape on
7	CM ON	O	Capstan/reel motor (M901) drive signal output terminal "H": motor on
8	LM LOD	O	Loading/tape operation motor control signal output to the LB1638M (IC361) (For the loading direction and forward side operation) *1
9	LM EJ	O	Loading/tape operation motor control signal output to the LB1638M (IC361) (For the eject direction and reverse side operation) *1
10	TUNON	O	Tuner system power supply on/off control signal output to the BA3918 (IC601) "H": tuner on
11	FM ON	O	FM system power supply on/off control signal output to the BA3918 (IC601) "H": FM on
12	PW ON	O	Main system power supply on/off control signal output to the BA3918 (IC601) "H": power on
13	MUT	O	Line muting control signal output terminal "H": line muting on
14	VOLCE	O	Chip enable signal output to the electrical volume (IC401)
15	VOLCKO	O	Serial data transfer clock signal output to the electrical volume (IC401)
16	VOLSO	O	Serial data output to the electrical volume (IC401)
17	AMPON	O	Standby control signal output to the power amplifier (IC751) "L": standby
18	$\overline{\text{AMPMUT}}$	O	Muting control signal output to the power amplifier (IC751) "L": muting on
19	$\overline{\text{DX}}$/LO	O	Local/DX selection signal output to the FM/AM tuner unit (TU1) "L": DX, "H": local
20	$\overline{\text{AM MONO}}$	O	AM forced monaural signal output terminal Not used (open)
21	GND	—	Ground terminal
22	DSTSEL	I	Destination setting terminal (fixed at center voltage)
23	D-BASS	I	D-BASS switch (SW951) input (A/D input)
24	KEYIN1	I	Key input terminal (A/D input) ⏏, INTRO 1, REPEAT 2, SHUF 3, BL SKIP 6, ATA 5, MTL 4, PRESET DISC +/– keys input (LSW921 to LSW927, LSW929 and LSW930)
25	KEYIN0	I	Key input terminal (A/D input) OFF, SOURCE, MODE ◀I▶, + ▶▶ ▶▶I SEEK AMS, – I◀◀ ◀◀ SEEK AMS, VOLUME –, SEL, VOLUME +, ATT , DSPL, BTM, LCL keys input (LSW901 to LSW912)
26	RC IN0	I	Rotary remote commander shift key A/D input terminal
27	VSM	I	FM and AM (MW/LW) signal meter voltage detection input from the FM/AM tuner unit (TU1)
28	AMIFIN	I	AM (MW/LW) intermediate frequency detection signal input from the FM/AM tuner unit (TU1)
29	FMIFIN	I	FM intermediate frequency detection signal input from the FM/AM tuner unit (TU1)
30	VDD2	—	Power supply terminal (+5V)
31	FM OSC	I	FM local oscillator detection signal input from the FM/AM tuner unit (TU1)
32	AM OSC	I	AM (MW/LW) local oscillator detection signal input from the FM/AM tuner unit (TU1)
33	GND	—	Ground terminal
34	NCO	O	Not used (open)
35	EO1	O	Main charge-pump control signal output terminal
36	TEST0	I	Setting terminal for the test (fixed at "L")
37	$\overline{\text{AM STIN}}$	I	AM stereo detection signal input terminal Not used (fixed at "L")
38	$\overline{\text{SEKOUT}}$	O	Seek control signal output to the FM/AM tuner unit (TU1)
39	$\overline{\text{MW}}$/SW	O	MW/SW selection signal output terminal "L": MW, "H": SW Not used (open)
40	BEEP	O	Beep sound output terminal

Pin No.	Pin Name	I/O	Function
41	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to accept function and eject keys in the power off status On at input of "L"
42	BU IN	I	Battery detect signal input terminal "H": battery on
43	MTLSEL	I/O	METAL control in/out terminal At initial mode: auto/manual mode selection input of METAL function "L": manual mode At manual mode: METAL on/off control signal output to the CXA2509AQ (IC301) "H" output: METAL on At auto mode: input at $\overline{\text{MTLIN}}$ (pin ⑲)
44	DOLON	I/O	Dolby control in/out terminal At initial mode: valid/invalid selection input of dolby function ("L" input: valid) At normal mode: dolby on/off control signal output ("H" output : dolby on) Not used this function in this set (fixed at "H")
45	$\overline{\text{AMSIN}}$	I	Whether a music is present or not from CXA2509AQ (IC301) is detected at auto music sensor "L": music is present, "H": music is not present
46	$\overline{\text{ST}}$	I/O	Input of FM stereo detection signal from FM/AM tuner unit (TU1), and output of forced monaural control signal to FM/AM tuner unit (TU1) (Commonly used for stereo display input and forced monaural output) FM stereo detection at input of "L", forced monaural at output of "L"
47	$\overline{\text{AMS ON}}$	O	Tape auto music sensor control signal output to the CXA2509AQ (IC301) "L" is output to lower the gain for audio level at FF/REW
48	$\overline{\text{N}}$/R OUT	O	Forward/reverse direction control signal output to the CXA2509AQ (IC301) "L: forward direction, "H": reverse direction
49	TAPMUT	O	Tape muting on/off control signal output to the CXA2509AQ (IC301) "H": tape muting on
50	ILLON	O	Power supply on/off control signal output terminal at the illumination and liquid crystal display driver (IC901) "H": power on At power select switch (S801) on mode: "H" output at the accessory on At power select switch (S801) off mode: "H" output at the power on
51	SD IN	I	Station detector detect input from the FM/AM tuner unit (TU1) Stop level for SEEK, BTM, etc. is determined SD is present at input of "H"
52	$\overline{\text{NOSESW}}$	I	Detects the removal of the attaching and removing type front panel block "L": attaching
53	$\overline{\text{TELMUT}}$	I	Telephone muting signal input terminal At input of "L", the signal is attenuated by –20 dB
54	REL T	I	Reel table rotation detect signal input from the take-up and supply reel sensor
55	$\overline{\text{ACCIN}}$	I	Accessory detect signal input terminal "L": accessory on
56	$\overline{\text{TESTIN}}$	I	Setting terminal for the test mode "L": test mode (normally fixed at "H")
57	RC IN1	I	Rotary remote commander shift key A/D input terminal
58	PW SEL	I	Power select switch (S801) input terminal "L": position A (halt mode), "H": position B (operation mode)
59	$\overline{\text{MTLIN}}$	I	Input terminal to set whether the auto metal function is present or not "L": auto metal function is present (fixed at "H")
60	ADON	O	Power supply on/off control signal output for the A/D conversion
61	KEYSEL	I	Setting terminal for the key (fixed at "H")
62	SEKOUTSEL	I	Active selection terminal for the $\overline{\text{SEKOUT}}$ (pin ㊳) (fixed at "L")
63	COLORSEL	I	Setting terminal for the illumination color "L": amber, "H": green
64	LCDCE	O	Chip enable output to the liquid crystal display driver (IC901)
65	LCDCKO	O	Serial data transfer clock signal output to the liquid crystal display driver (IC901)
66	LCDSO	O	Serial data output to the liquid crystal display driver (IC901)
67	$\overline{\text{LCDINH}}$	O	Blank indicate control signal output to the liquid crystal display driver (IC901) "L": no display
68	UNICKI	I	Serial data reading clock signal input terminal (for SONY bus)

Pin No.	Pin Name	I/O	Function
69	UNISO	O	Serial data output to the bus interface (IC701) (for SONY bus)
70	UNISI	I	Serial data input from the bus interface (IC701) (for SONY bus)
71	UNICKO	O	Serial data transfer clock signal output to the bus interface (IC701) (for SONY bus)
72	$\overline{\text{BUSON}}$	O	Bus on/off control signal output to the bus interface (IC701) (for SONY bus) "L": bus on
73	$\overline{\text{SYSRST}}$	O	Reset signal output to the bus interface (IC701) (for SONY bus) "L": reset
74	VREG	O	CPU regulator output terminal Connected to capacitor
75	GND	—	Ground terminal
76	X OUT	O	Main system clock output terminal (4.5 MHz)
77	X IN	I	Main system clock input terminal (4.5 MHz)
78	CE	I	CPU chip enable signal input (fixed at "H")
79	VDD1	—	Power supply terminal (+5V)
80	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC502) and reset switch (S503) "L" is input for several 100 msec after power on, then it changes to "H"

*1 loading/tape operation motor control

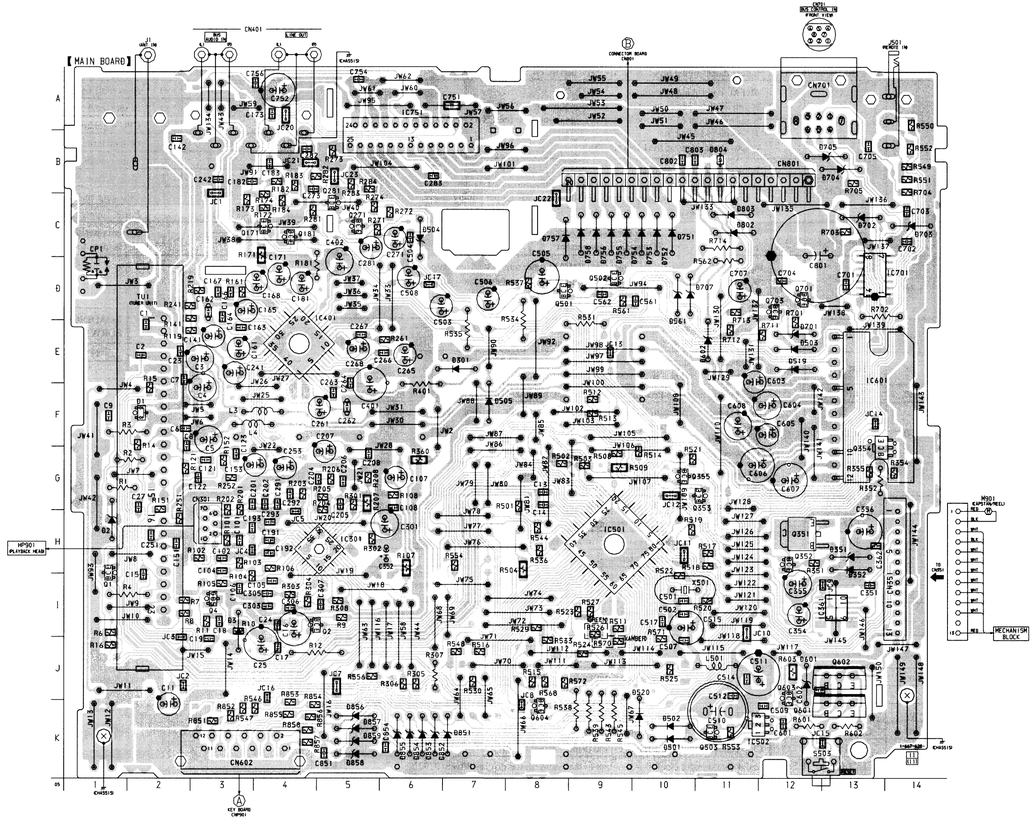
MODE / TERMINAL	STOP	LOADING/ FORWARD	EJECT/ REVERSE	BRAKE
LM LOD (pin ⑧)	"L"	"H"	"L"	"H"
LM EJ (pin ⑨)	"L"	"L"	"H"	"H"

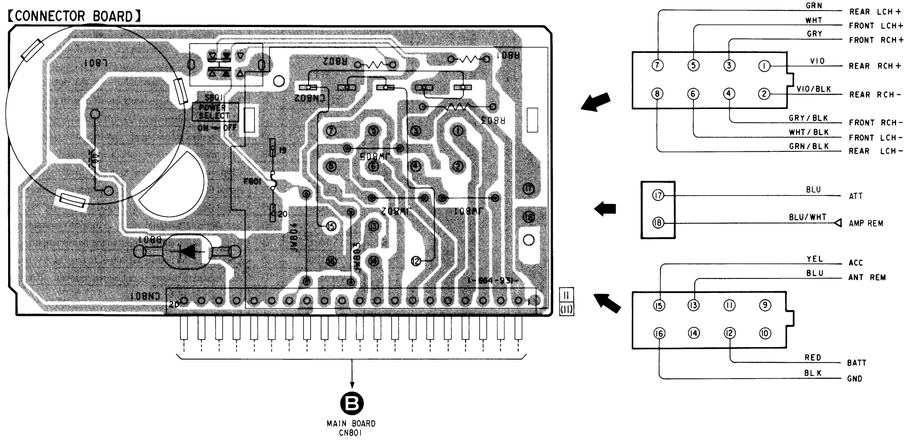
• Semiconductor Location
– MAIN Board –

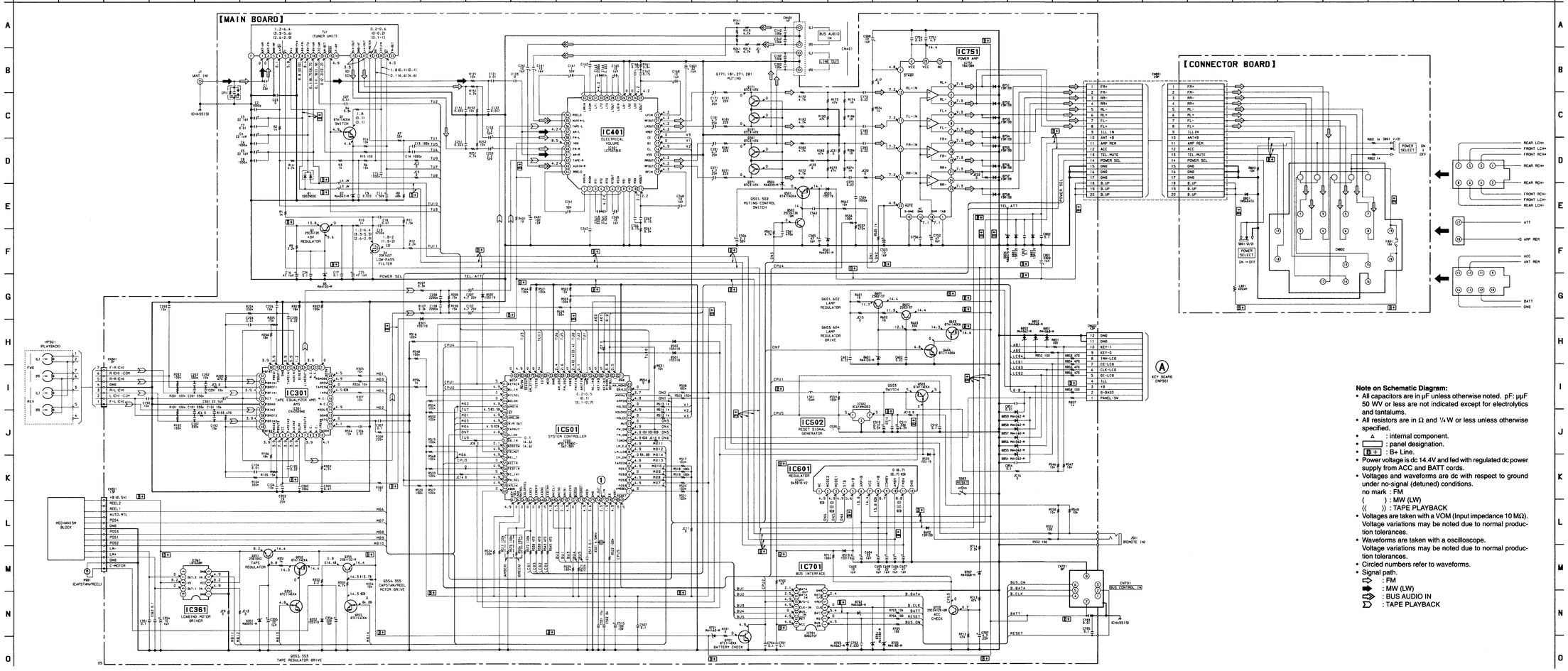
Ref. No.	Location
D1	F-2
D2	H-1
D3	I-3
D301	E-7
D351	H-13
D352	H-13
D501	K-10
D502	K-10
D503	E-12
D504	C-6
D505	F-7
D519	E-12
D520	K-10
D561	D-10
D601	J-12
D602	E-11
D701	E-12
D702	C-13
D703	C-14
D704	B-13
D705	B-13
D707	D-10
D751	C-10
D752	C-10
D753	C-10
D754	C-9
D755	C-9
D756	C-9
D757	C-8
D758	C-9
D802	C-11
D803	C-11
D804	B-11
D851	K-7
D852	K-6
D853	K-6
D854	K-6
D855	K-6
D856	K-5
D857	K-5
D858	K-5
D859	K-5
IC301	H-5
IC361	I-13
IC401	E-4
IC501	H-9
IC502	K-11
IC601	F-13
IC701	D-13
IC751	B-6
Q1	I-1
Q2	I-5
Q4	I-3
Q171	C-4
Q181	C-4
Q271	C-5
Q281	C-5
Q351	H-12
Q352	H-12
Q353	G-11
Q354	G-13
Q355	G-10
Q501	D-8
Q502	D-9
Q503	K-11
Q601	K-13
Q602	J-13
Q603	J-12
Q604	K-8
Q701	D-12
Q703	D-12

Note on Printed Wiring Boards:
• o——— : parts extracted from the component side.
• △ : internal component.

6-2. PRINTED WIRING BOARDS – MAIN Section –



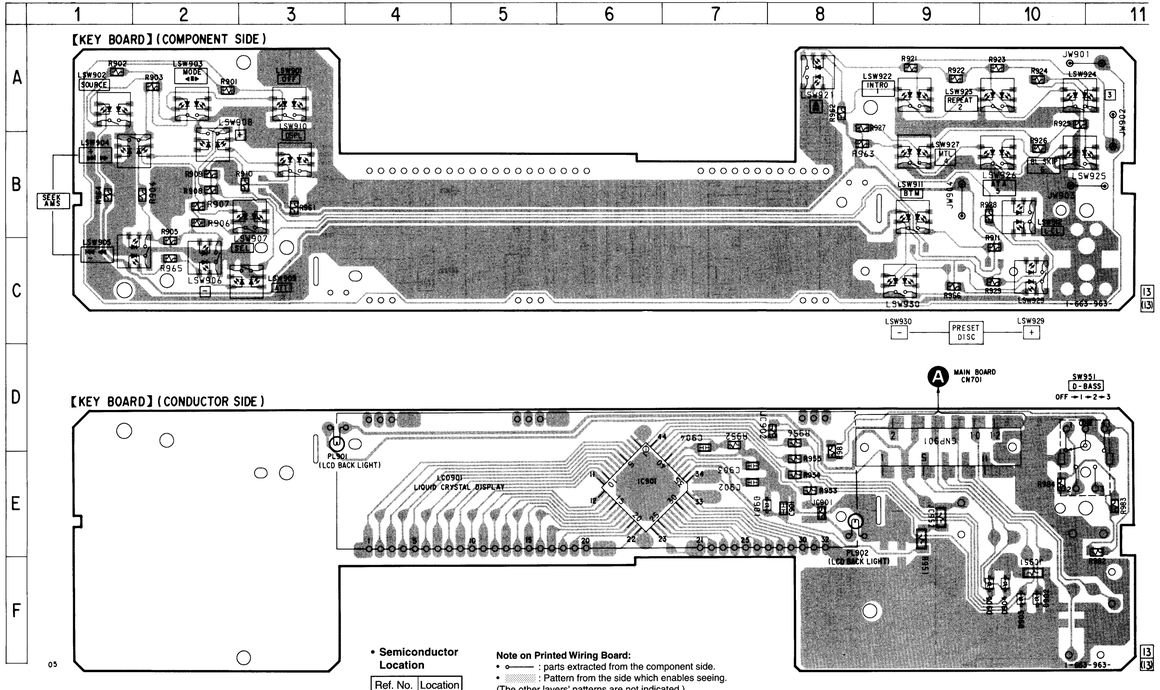




Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF
  50 WV or less are not indicated except for electrolytes and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- □ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW (LW)
  《 》: TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW (LW)
  ⇨ : BUS AUDIO IN
  ⇨ : TAPE PLAYBACK

6-4. PRINTED WIRING BOARD – PANEL Section –



• Semiconductor Location

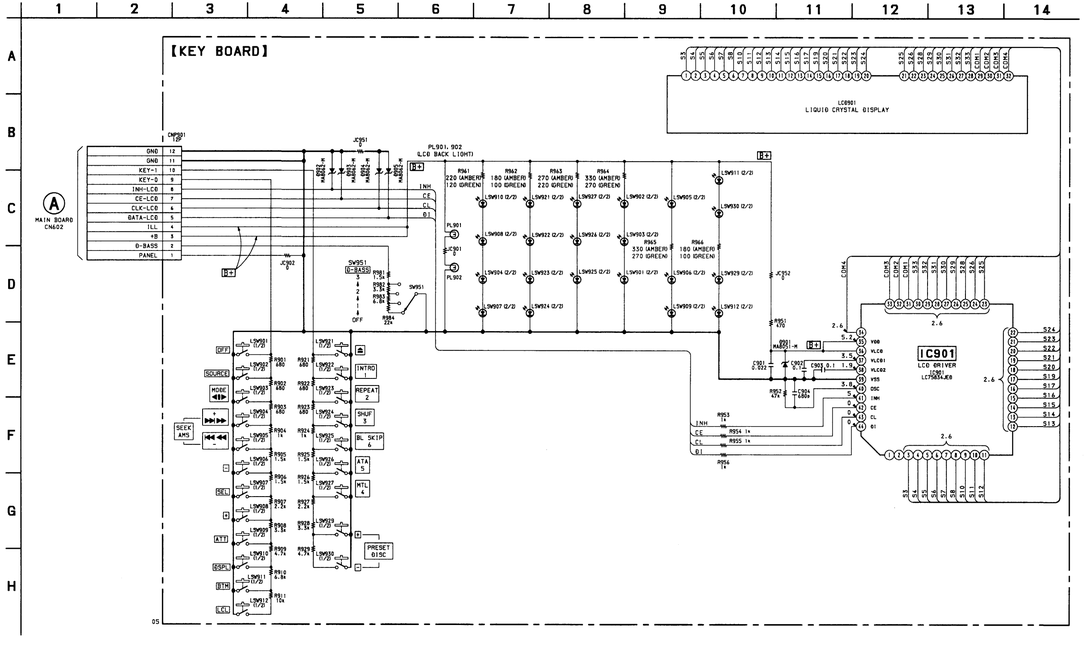
Ref. No.	Location
D901	E-7
D902	F-10
D903	F-10
D904	E-10
D905	E-9
IC901	E-6

Note on Printed Wiring Board:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

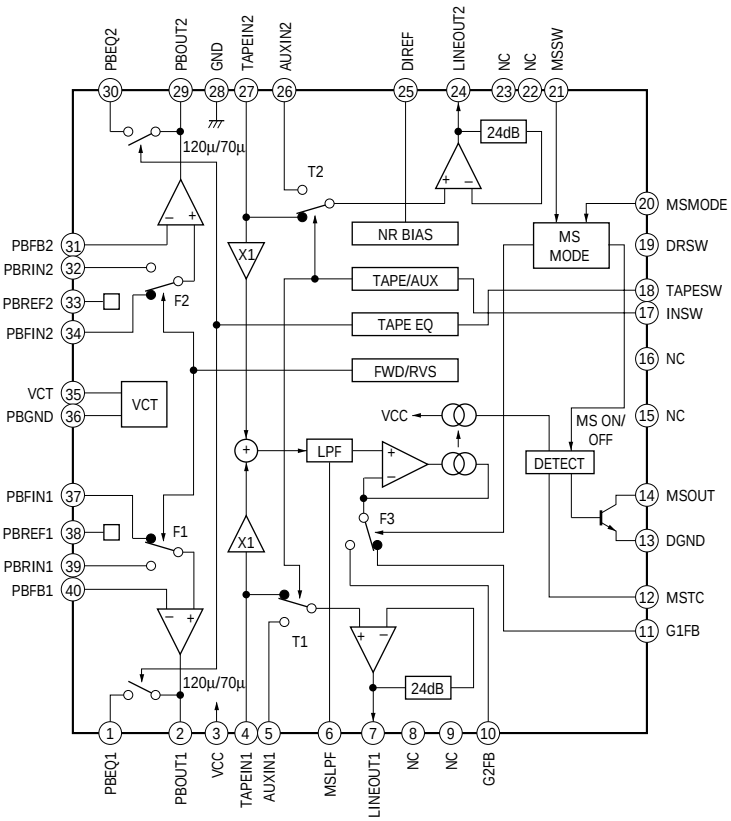
6-5. SCHEMATIC DIAGRAM – PANEL Section –



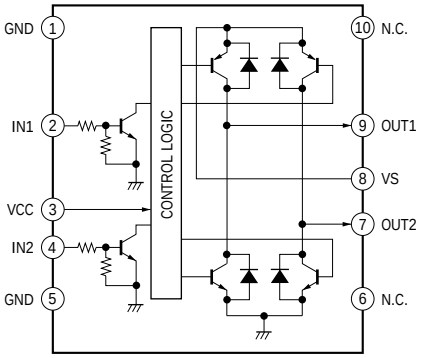
Note on Schematic Diagram:
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- [ ] : panel designation.
- [B+] : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

• IC Block Diagrams – MAIN Board –

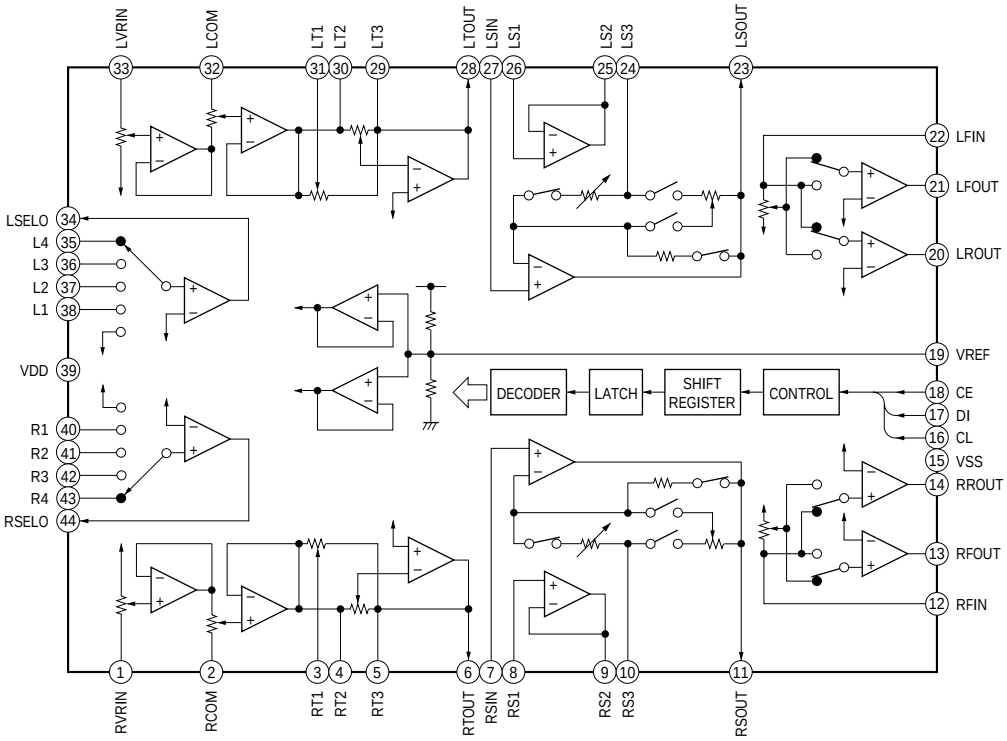
IC301 CXA2509AQ-T4



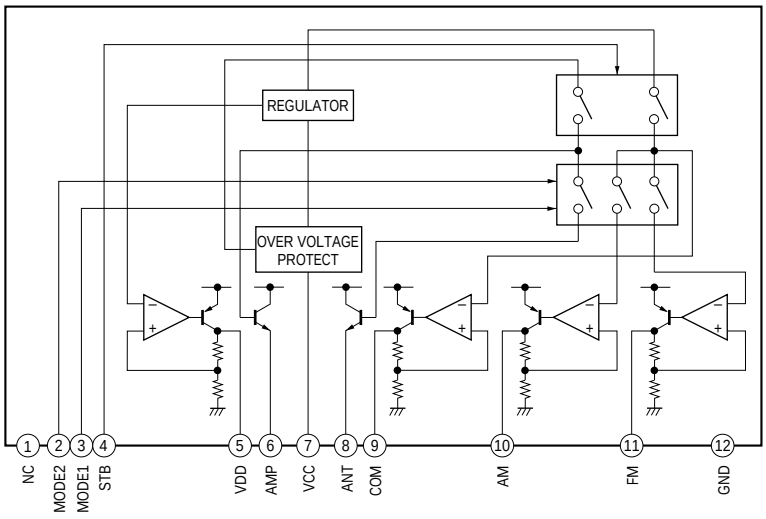
IC361 LB1638M



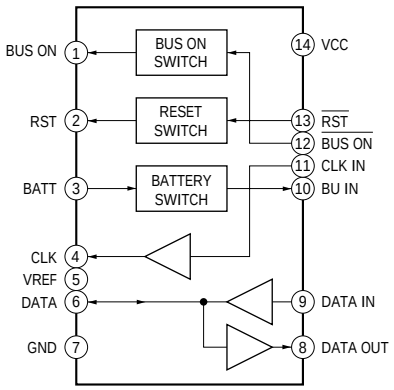
IC401 LC75373ED



IC601 BA3918-V2

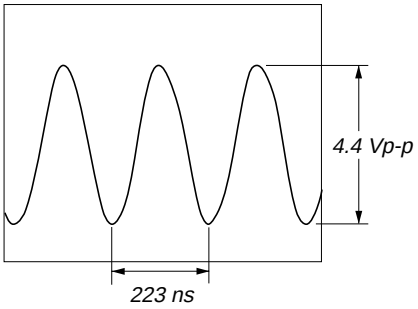


IC701 BA8270F-E2



• Waveform

❶ IC501 ⑰ (X_IN)

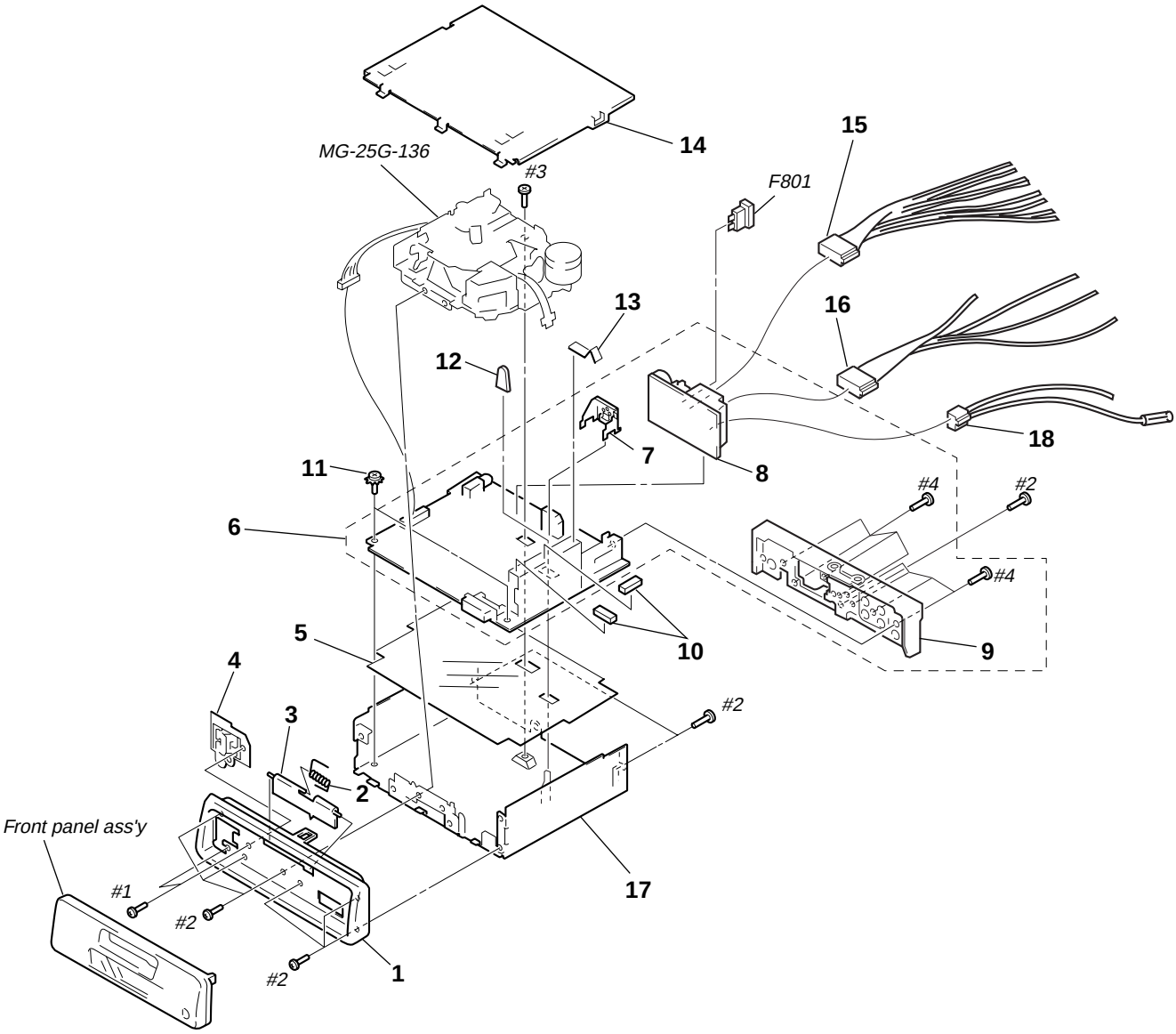


SECTION 7
EXPLODED VIEWS

NOTE:

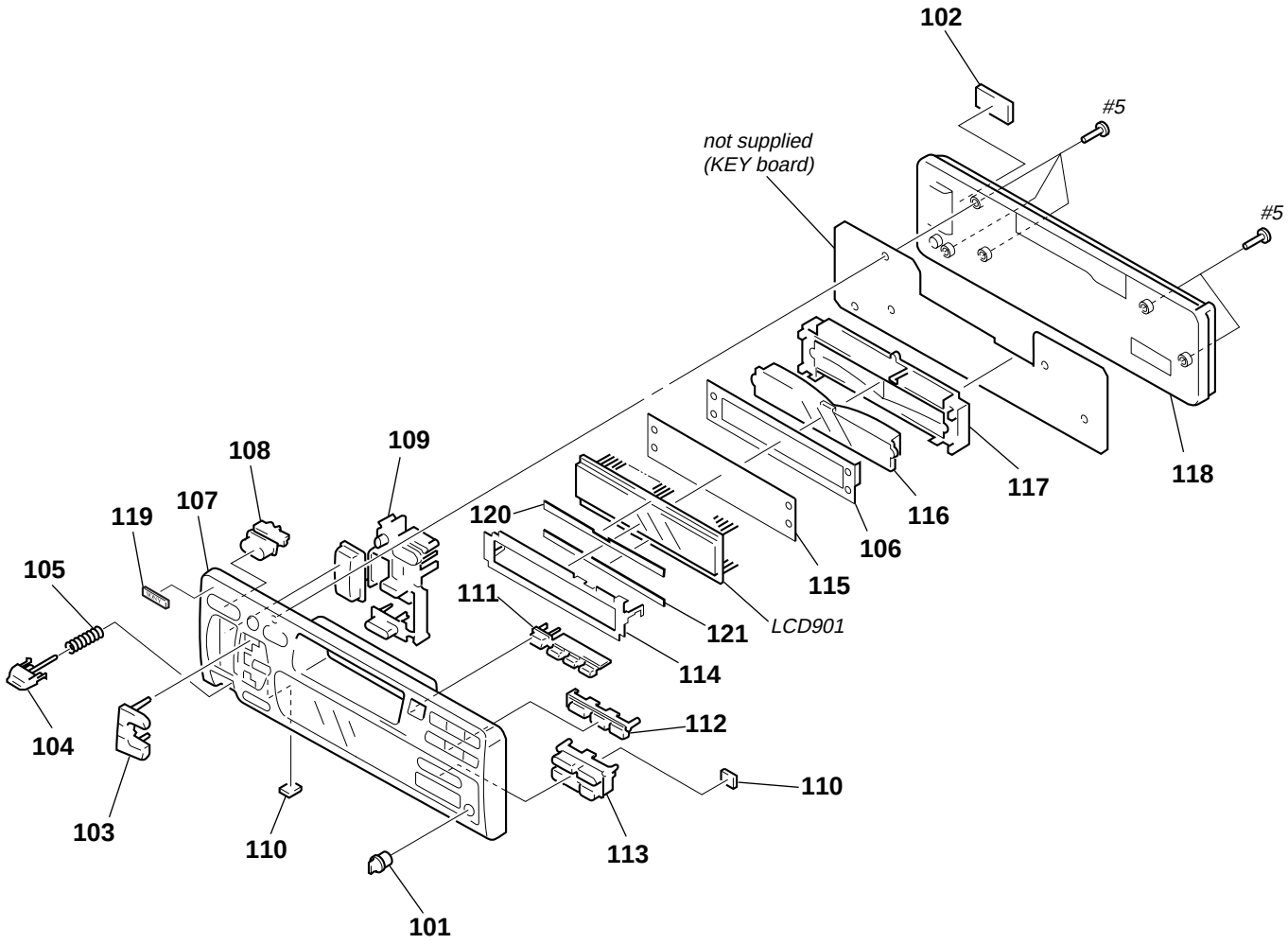
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) CHASSIS SECTION



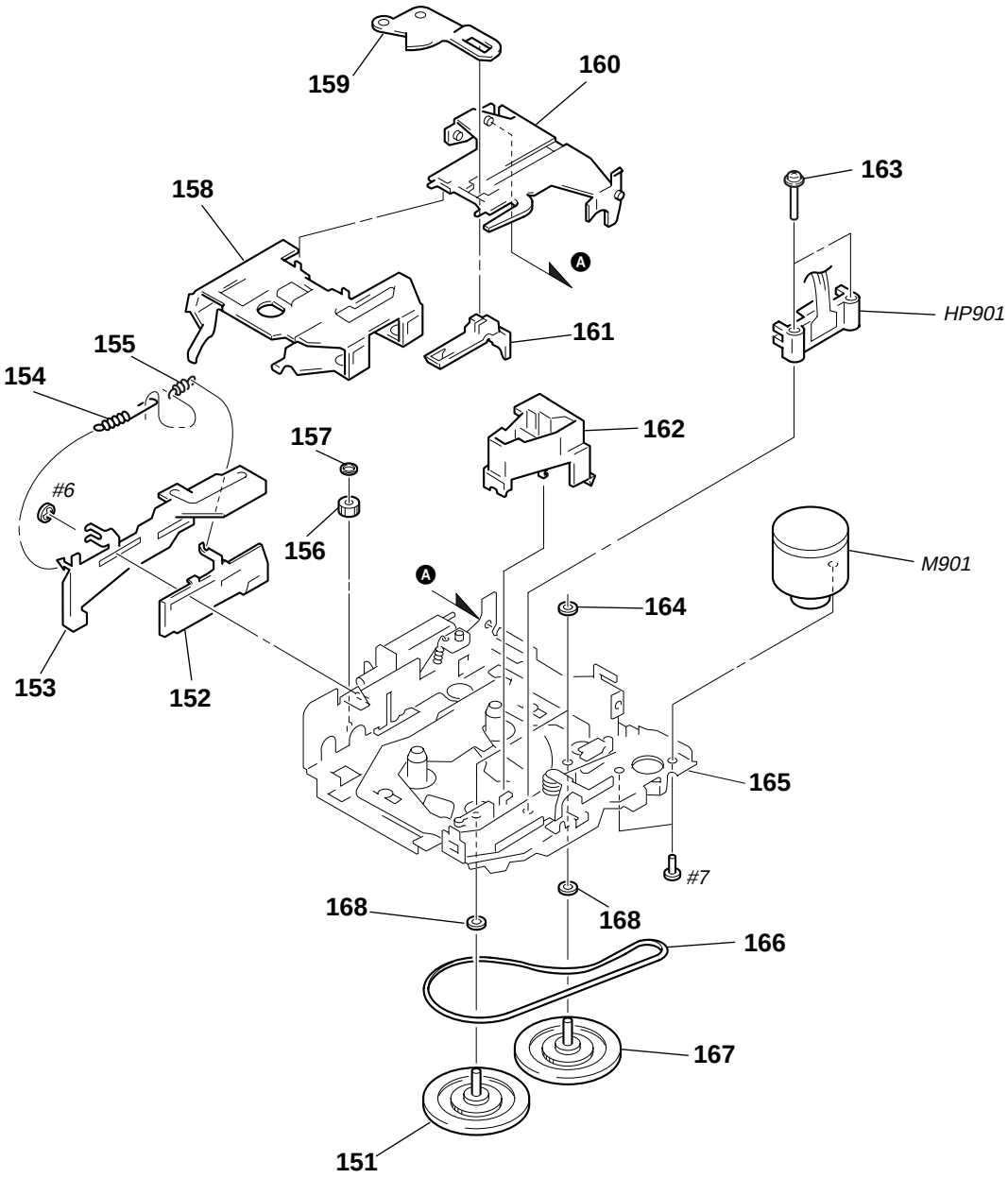
Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-932-205-21	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
5	3-016-595-01	INSULATOR	
* 6	A-3313-462-A	MAIN BOARD, COMPLETE (AMBER)	
* 6	A-3313-467-A	MAIN BOARD, COMPLETE (GREEN)	
* 7	3-019-147-01	BRACKET (IC) (M)	
* 8	A-3309-913-A	CONNECTOR BOARD, COMPLETE	
* 9	3-018-613-01	HEAT SINK	
10	3-935-014-01	CUSHION (U)	
11	3-915-923-01	SCREW, GROUND POINT	
12	3-012-859-01	CAP (25), RUBBER	
13	3-937-650-01	PLATE (C), GROUND	
* 14	X-3373-269-1	COVER ASSY (ISO)	
15	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S)(SPEAKER)	
16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
* 17	3-009-813-01	CHASSIS	
18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	3-018-799-01	BUTTON (D-BASS)	
102	3-015-036-01	CUSHION (BACK PANEL)	
103	3-016-932-01	BUTTON (L) (2) (+. –)	
104	3-009-304-01	BUTTON (RELEASE)	
105	3-932-475-01	SPRING (RELEASE)	
* 106	3-019-149-01	PLATE, LCD	
107	X-3374-683-1	PANEL SUB ASSY	
108	3-009-300-01	BUTTON (SOURCE)	
109	3-018-658-01	BUTTON (L) (●. OFF.+ ▶▶I▶▶. SEEK AMS. I◀◀ ◀◀ –. ●. SEL. ATT)	
* 110	3-014-602-01	SPACER (A)	
111	3-016-933-01	BUTTON (1-3) (⏏. 1. 2. 3)	
112	3-016-931-11	BUTTON (4-6) (4. 5. 6)	
113	3-016-936-01	BUTTON (R) (B) (BTM. LCL. – DISC +)	
* 114	3-019-151-01	PLATE (LCD), GROUND	
* 115	3-019-150-01	SHEET (REFLECTOR)	
* 116	3-018-612-01	PLATE, LIGHT GUIDE	
* 117	3-018-611-01	HOLDER (LCD)	
118	3-009-295-01	PANEL, FRONT BACK	
119	3-904-194-01	EMBLEM (NO. 2.5), SONY	
* 120	3-024-391-01	SHEET (LCD)	
* 121	3-024-846-01	SHEET (LCD) B	
LCD901	1-801-967-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) MECHANISM DECK SECTION (MG-25G-136)



Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3301-267-A	CHASSIS ASSY (G)	
166	3-017-302-01	BELT (25)	
167	3-936-853-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (REEL/CAPSTAN)	

CONNECTOR KEY

SECTION 8
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3309-913-A	CONNECTOR BOARD, COMPLETE			
		**********			
		(Included in MAIN BOARD, COMPLETE)			
		< CONNECTOR >			
CN801	1-778-984-11	PIN, CONNECTOR (PC BOARD) 20P			
CN802	1-778-985-11	PIN, CONNECTOR (ISO)			
		< DIODE >			
D801	8-719-049-38	DIODE 1N5404TU			
		< COIL >			
L801	1-416-046-11	COIL, CHOKE 400uH			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-429-11	CARBON	10K	5%	1/4W
		< SWITCH >			
S801	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
**********					
		KEY BOARD			
		**********			
*	3-018-611-01	HOLDER (LCD)			
*	3-018-612-01	PLATE, LIGHT GUIDE			
*	3-019-149-01	PLATE, LCD			
*	3-019-150-01	SHEET (REFLECTOR)			
*	3-019-151-01	PLATE (LCD), GROUND			
		< CAPACITOR >			
C901	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C902	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C903	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C904	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
		< CONNECTOR >			
CNP901	1-764-423-11	PIN, CONNECTOR 12P			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D901	8-719-420-90	DIODE MA8051-M	
D902	8-719-422-64	DIODE MA8062-M	
D903	8-719-422-64	DIODE MA8062-M	
D904	8-719-422-64	DIODE MA8062-M	
D905	8-719-422-64	DIODE MA8062-M	
		< IC >	
IC901	8-759-443-68	IC LC75834JED	
		< CHIP CONDUCTOR >	
JC901	1-216-295-00	SHORT 0	
JC902	1-216-295-00	SHORT 0	
JC951	1-216-296-00	SHORT 0	
JC952	1-216-296-00	SHORT 0	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-801-967-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
LSW901	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(OFF)(AMBER)	
LSW901	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(OFF)(GREEN)	
LSW902	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(SOURCE) (AMBER)	
LSW902	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(SOURCE) (GREEN)	
LSW903	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(MODE ◀I▶) (AMBER)	
LSW903	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(MODE ◀I▶) (GREEN)	
LSW904	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(+ ▶▶I▶▶) (AMBER)	
LSW904	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(+ ▶▶I▶▶) (GREEN)	
LSW905	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(I◀◀ ◀◀ –) (AMBER)	
LSW905	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(I◀◀ ◀◀ –) (GREEN)	
LSW906	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(–)(AMBER)	
LSW906	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(–)(GREEN)	
LSW907	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(SEL)(AMBER)	
LSW907	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(SEL)(GREEN)	
LSW908	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(+)(AMBER)	

Ref. No.	Part No.	Description	Remark
LSW908	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(+)(GREEN)	
LSW909	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(ATT)(AMBER)	
LSW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(ATT)(GREEN)	
LSW910	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(DSPL) (AMBER)	
LSW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(DSPL) (GREEN)	
LSW911	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(BTM) (AMBER)	
LSW911	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(BTM) (GREEN)	
LSW912	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(LCL) (AMBER)	
LSW912	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(LCL) (GREEN)	
LSW921	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(⏏)(AMBER)	
LSW921	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(⏏)(GREEN)	
LSW922	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(1/INTRO) (AMBER)	
LSW922	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(1/INTRO) (GREEN)	
LSW923	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(2/REPEAT) (AMBER)	
LSW923	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(2/REPEAT) (GREEN)	
LSW924	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(3/SHUF) (AMBER)	
LSW924	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(3/SHUF) (GREEN)	
LSW925	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(6/BL.SKIP) (AMBER)	
LSW925	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(6/BL.SKIP) (GREEN)	
LSW926	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(5/ATA) (AMBER)	
LSW926	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(5/ATA) (GREEN)	
LSW927	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(4/MTL) (AMBER)	
LSW927	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(4/MTL) (GREEN)	
LSW929	1-762-617-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET +)(AMBER)	
LSW929	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET +)(GREEN)	
LSW930	1-762-617-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET –)(AMBER)	
LSW930	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET –)(GREEN)	
		< PILOT LAMP >	
PL901	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	
PL902	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	
		< RESISTOR >	
R901	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R902	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R903	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R904	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R905	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R906	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R907	1-216-659-11	METAL CHIP 2.2K 0.5% 1/10W	
R908	1-216-663-11	METAL CHIP 3.3K 0.5% 1/10W	
R909	1-216-667-11	METAL CHIP 4.7K 0.5% 1/10W	
R910	1-216-671-11	METAL CHIP 6.8K 0.5% 1/10W	
R911	1-208-806-11	RES, CHIP 10K 2% 1/10W	
R921	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R922	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R923	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R924	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R925	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R926	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R927	1-216-659-11	METAL CHIP 2.2K 0.5% 1/10W	
R928	1-216-663-11	METAL CHIP 3.3K 0.5% 1/10W	
R929	1-216-667-11	METAL CHIP 4.7K 0.5% 1/10W	
R951	1-216-190-00	RES, CHIP 470 5% 1/8W	
R952	1-216-089-00	RES, CHIP 47K 5% 1/10W	
R953	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R954	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R955	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R956	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R961	1-216-027-00	METAL CHIP 120 5% 1/10W (GREEN)	
R961	1-216-033-00	METAL CHIP 220 5% 1/10W (AMBER)	
R962	1-216-025-00	RES, CHIP 100 5% 1/10W (GREEN)	
R962	1-216-031-00	METAL CHIP 180 5% 1/10W (AMBER)	
R963	1-216-033-00	METAL CHIP 220 5% 1/10W (GREEN)	
R963	1-216-035-00	METAL CHIP 270 5% 1/10W (AMBER)	
R964	1-216-035-00	METAL CHIP 270 5% 1/10W (GREEN)	
R964	1-216-037-00	METAL CHIP 330 5% 1/10W (AMBER)	
R965	1-216-035-00	METAL CHIP 270 5% 1/10W (GREEN)	
R965	1-216-037-00	METAL CHIP 330 5% 1/10W (AMBER)	
R966	1-216-025-00	RES, CHIP 100 5% 1/10W (GREEN)	
R966	1-216-031-00	METAL CHIP 180 5% 1/10W (AMBER)	
R981	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R982	1-216-663-11	METAL CHIP 3.3K 0.5% 1/10W	
R983	1-216-671-11	METAL CHIP 6.8K 0.5% 1/10W	
R984	1-216-081-00	METAL CHIP 22K 5% 1/10W	
		< SWITCH >	
SW951	1-762-937-11	SWITCH, ROTARY (D-BASS)	

****

*	A-3313-462-A	MAIN BOARD, COMPLETE (AMBER)
*	A-3313-467-A	MAIN BOARD, COMPLETE (GREEN)
		**********
		(Including in CONNECTOR BOARD, COMPLETE)
*	3-018-613-01	HEAT SINK
*	3-019-147-01	BRACKET (IC) (M)

MAIN

Ref. No.	Part No.	Description			Remark
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-124-234-00	ELECT	22uF	20%	16V
C4	1-124-234-00	ELECT	22uF	20%	16V
C5	1-124-234-00	ELECT	22uF	20%	16V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C8	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C9	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C11	1-126-160-11	ELECT	1uF	20%	50V
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C14	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C15	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C16	1-124-589-11	ELECT	47uF	20%	16V
C17	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C18	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C19	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C23	1-216-295-00	SHORT	0		
C24	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C25	1-124-589-11	ELECT	47uF	20%	16V
C27	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C104	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C105	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C106	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C107	1-126-163-11	ELECT	4.7uF	20%	50V
C108	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C121	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C122	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C123	1-216-295-00	SHORT	0		
C141	1-126-157-11	ELECT	10uF	20%	16V
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C151	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C153	1-124-257-00	ELECT	2.2uF	20%	50V
C161	1-126-160-11	ELECT	1uF	20%	50V
C162	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C163	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C164	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C165	1-126-157-11	ELECT	10uF	20%	16V
C166	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C167	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C168	1-126-157-11	ELECT	10uF	20%	16V
C171	1-126-163-11	ELECT	4.7uF	20%	50V
C173	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C181	1-126-163-11	ELECT	4.7uF	20%	50V
C182	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C183	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C191	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C192	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C193	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C204	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C205	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V

Ref. No.	Part No.	Description			Remark
C206	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C207	1-126-163-11	ELECT	4.7uF	20%	50V
C208	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C241	1-126-157-11	ELECT	10uF	20%	16V
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C251	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C253	1-124-257-00	ELECT	2.2uF	20%	50V
C261	1-126-160-11	ELECT	1uF	20%	50V
C262	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C263	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C264	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C265	1-126-157-11	ELECT	10uF	20%	16V
C266	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C267	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C268	1-126-157-11	ELECT	10uF	20%	16V
C271	1-126-163-11	ELECT	4.7uF	20%	50V
C273	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C281	1-126-163-11	ELECT	4.7uF	20%	50V
C282	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C283	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C291	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C292	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C293	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C306	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C307	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C351	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C352	1-131-359-41	TANTALUM	10uF	10%	25V
C354	1-126-157-11	ELECT	10uF	20%	16V
C355	1-124-234-00	ELECT	22uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C362	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C401	1-124-584-00	ELECT	100uF	20%	10V
C402	1-124-234-00	ELECT	22uF	20%	16V
C501	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C502	1-163-091-00	CERAMIC CHIP	8PF		50V
C503	1-126-157-11	ELECT	10uF	20%	16V
C504	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C505	1-124-589-11	ELECT	47uF	20%	16V
C506	1-124-257-00	ELECT	2.2uF	20%	50V
C507	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C508	1-126-157-11	ELECT	10uF	20%	16V
C509	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C510	1-119-776-11	DOUBLE LAYER	0.1F		5.5V
C511	1-128-057-11	ELECT	330uF	20%	6.3V
C512	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C514	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C515	1-124-584-00	ELECT	100uF	20%	10V
C517	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C561	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C562	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C601	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C602	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C603	1-126-157-11	ELECT	10uF	20%	16V
C604	1-124-234-00	ELECT	22uF	20%	16V
C605	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description			Remark
C606	1-124-589-11	ELECT	47uF	20%	16V
C607	1-124-589-11	ELECT	47uF	20%	16V
C608	1-124-234-00	ELECT	22uF	20%	16V
C701	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C702	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C703	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C704	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C705	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C707	1-126-163-11	ELECT	4.7uF	20%	50V
C751	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C752	1-124-589-11	ELECT	47uF	20%	16V
C754	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C756	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C801	1-126-936-11	ELECT	3300uF	20%	16V
C802	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C803	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C851	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C854	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN401	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT)			
CN602	1-764-422-11	PLUG, CONNECTOR 12P			
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
		< CONPOSITION CIRCUIT BLOCK >			
* CP1	1-517-422-11	GAP, SPARK			
		< DIODE >			
D1	8-719-991-65	DIODE SB02W03C			
D2	8-719-035-62	DIODE MA4047-M(TA)			
D3	8-719-035-94	DIODE MA4100-M(TA)			
D301	8-719-911-19	DIODE 1SS119			
D351	8-719-422-97	DIODE MA8091-M(TA)			
D352	8-719-911-19	DIODE 1SS119			
D501	8-719-911-19	DIODE 1SS119			
D502	8-719-911-19	DIODE 1SS119			
D503	8-719-911-19	DIODE 1SS119			
D504	8-719-035-54	DIODE MA4039-M(TA)			
D505	8-719-911-19	DIODE 1SS119			
D519	8-719-911-19	DIODE 1SS119			
D520	8-719-911-19	DIODE 1SS119			
D561	8-749-035-90	DIODE MA4091-M(TA)			
D601	8-719-034-74	DIODE MA4120-M(TA)			
D602	8-719-970-02	DIODE 1SR139-400			
D701	8-719-034-90	DIODE MA4160-M(QZ)			
D702	8-719-035-79	DIODE MA4068-H(TA)			
D703	8-719-035-74	DIODE MA4062-M(TA)			
D704	8-719-034-94	DIODE MA4180-M(QZ)			
D705	8-719-034-94	DIODE MA4180-M(QZ)			
D707	8-719-035-79	DIODE MA4068-H(TA)			
D751	8-719-970-02	DIODE 1SR139-400			
D752	8-719-970-02	DIODE 1SR139-400			
D753	8-719-970-02	DIODE 1SR139-400			
D754	8-719-970-02	DIODE 1SR139-400			
D755	8-719-970-02	DIODE 1SR139-400			

Ref. No.	Part No.	Description	Remark
D756	8-719-970-02	DIODE 1SR139-400	
D757	8-719-970-02	DIODE 1SR139-400	
D758	8-719-970-02	DIODE 1SR139-400	
D802	8-719-970-02	DIODE 1SR139-400	
D803	8-719-970-02	DIODE 1SR139-400	
D804	8-719-422-76	DIODE MA8075-M	
D851	8-719-109-97	DIODE RD6.8ES-B2	
D852	8-719-109-97	DIODE RD6.8ES-B2	
D853	8-719-035-74	DIODE MA4062-M(TA)	
D854	8-719-035-74	DIODE MA4062-M(TA)	
D855	8-719-035-74	DIODE MA4062-M(TA)	
D856	8-719-035-74	DIODE MA4062-M(TA)	
D857	8-719-034-90	DIODE MA4160-M(QZ)	
D858	8-719-035-74	DIODE MA4062-M(TA)	
D859	8-719-035-74	DIODE MA4062-M(TA)	
		< IC >	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC361	8-759-823-87	IC LB1638M	
IC401	8-759-443-67	IC LC75373ED	
IC501	8-759-493-98	IC uPD17708GC-567-3B9	
IC502	8-759-363-81	IC XC61AN4002PR	
IC601	8-759-347-49	IC BA3918-V2	
IC701	8-759-449-89	IC BA8270F-E2	
IC751	8-759-490-74	IC TDA7384	
		< JACK >	
J1	1-764-808-14	JACK (ANT)(ANT IN)	
J501	1-566-822-41	JACK (REMOTE IN)	
		< CHIP CONDUCTOR >	
JC1	1-216-296-00	SHORT 0	
JC2	1-216-295-00	SHORT 0	
JC3	1-216-295-00	SHORT 0	
JC4	1-216-295-00	SHORT 0	
JC5	1-216-295-00	SHORT 0	
JC7	1-216-296-00	SHORT 0	
JC8	1-216-295-00	SHORT 0	
JC9	1-216-295-00	SHORT 0	
JC10	1-216-296-00	SHORT 0	
JC11	1-216-296-00	SHORT 0	
JC12	1-216-296-00	SHORT 0	
JC13	1-216-295-00	SHORT 0	
JC14	1-216-295-00	SHORT 0	
JC15	1-216-295-00	SHORT 0	
JC16	1-216-295-00	SHORT 0	
JC17	1-216-295-00	SHORT 0	
JC20	1-216-296-00	SHORT 0	
JC21	1-216-296-00	SHORT 0	
JC22	1-216-296-00	SHORT 0	
JC23	1-216-296-00	SHORT 0	
		< COIL >	
L501	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q1	8-729-027-23	TRANSISTOR DTA114EKA-T146	

MAIN

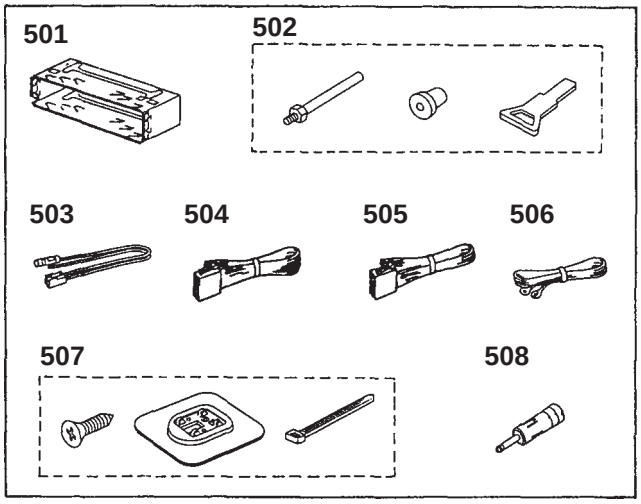
Ref. No.	Part No.	Description			Remark
Q2	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q4	8-729-021-94	TRANSISTOR	2SK1657-T1B		
Q171	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q181	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q271	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q281	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q351	8-729-015-11	TRANSISTOR	2SD1802FAST-TL		
Q352	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q353	8-729-900-53	TRANSISTOR	DTC114EK		
Q354	8-729-106-60	TRANSISTOR	2SB1115A		
Q355	8-729-900-53	TRANSISTOR	DTC114EK		
Q501	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q502	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q503	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q601	8-729-423-99	TRANSISTOR	2SD2137-OP		
Q602	8-729-423-99	TRANSISTOR	2SD2137-OP		
Q603	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q604	8-729-900-53	TRANSISTOR	DTC114EK		
Q701	8-729-900-53	TRANSISTOR	DTC114EK		
Q703	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R1	1-249-417-11	CARBON	1K	5%	1/4W
R2	1-249-417-11	CARBON	1K	5%	1/4W
R3	1-249-417-11	CARBON	1K	5%	1/4W
R4	1-247-843-11	CARBON	3.3K	5%	1/4W
R6	1-216-073-00	METAL CHIP	10K	5%	1/10W
R7	1-216-085-00	METAL CHIP	33K	5%	1/10W
R8	1-216-093-00	METAL CHIP	68K	5%	1/10W
R9	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R10	1-216-049-11	RES, CHIP	1K	5%	1/10W
R11	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R12	1-249-421-11	CARBON	2.2K	5%	1/4W
R14	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R15	1-216-029-00	METAL CHIP	150	5%	1/10W
R16	1-216-073-00	METAL CHIP	10K	5%	1/10W
R101	1-216-097-00	RES, CHIP	100K	5%	1/10W
R102	1-216-097-00	RES, CHIP	100K	5%	1/10W
R103	1-216-041-00	METAL CHIP	470	5%	1/10W
R104	1-216-109-00	METAL CHIP	330K	5%	1/10W
R105	1-216-077-00	METAL CHIP	15K	5%	1/10W
R106	1-216-079-00	METAL CHIP	18K	5%	1/10W
R107	1-216-210-00	RES, CHIP	3.3K	5%	1/8W
R108	1-216-077-00	METAL CHIP	15K	5%	1/10W
R119	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R121	1-216-073-00	METAL CHIP	10K	5%	1/10W
R141	1-216-073-00	METAL CHIP	10K	5%	1/10W
R151	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R152	1-216-073-00	METAL CHIP	10K	5%	1/10W
R161	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R171	1-216-182-00	RES, CHIP	220	5%	1/8W
R172	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R173	1-216-089-00	RES, CHIP	47K	5%	1/10W
R174	1-216-121-00	RES, CHIP	1M	5%	1/10W
R181	1-249-409-11	CARBON	220	5%	1/4W
R182	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R183	1-216-089-00	RES, CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R184	1-216-121-00	RES, CHIP	1M	5%	1/10W
R201	1-216-097-00	RES, CHIP	100K	5%	1/10W
R202	1-216-097-00	RES, CHIP	100K	5%	1/10W
R203	1-216-041-00	METAL CHIP	470	5%	1/10W
R204	1-216-109-00	METAL CHIP	330K	5%	1/10W
R205	1-216-077-00	METAL CHIP	15K	5%	1/10W
R206	1-216-079-00	METAL CHIP	18K	5%	1/10W
R207	1-216-210-00	RES, CHIP	3.3K	5%	1/8W
R208	1-216-077-00	METAL CHIP	15K	5%	1/10W
R219	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W
R251	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R252	1-216-073-00	METAL CHIP	10K	5%	1/10W
R261	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R271	1-216-033-00	METAL CHIP	220	5%	1/10W
R272	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R273	1-216-089-00	RES, CHIP	47K	5%	1/10W
R274	1-216-121-00	RES, CHIP	1M	5%	1/10W
R281	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R283	1-216-089-00	RES, CHIP	47K	5%	1/10W
R284	1-216-121-00	RES, CHIP	1M	5%	1/10W
R301	1-216-079-00	METAL CHIP	18K	5%	1/10W
R302	1-216-097-00	RES, CHIP	100K	5%	1/10W
R303	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R304	1-216-077-00	METAL CHIP	15K	5%	1/10W
R305	1-216-073-00	METAL CHIP	10K	5%	1/10W
R306	1-216-073-00	METAL CHIP	10K	5%	1/10W
R307	1-249-429-11	CARBON	10K	5%	1/4W
R308	1-216-105-00	RES, CHIP	220K	5%	1/10W
R351	1-216-049-11	RES, CHIP	1K	5%	1/10W
R352	1-249-385-11	CARBON	2.2	5%	1/6W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R355	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R360	1-216-150-00	RES, CHIP	10	5%	1/8W
R401	1-249-393-11	CARBON	10	5%	1/4W
R501	1-216-097-00	RES, CHIP	100K	5%	1/10W
R502	1-216-073-00	METAL CHIP	10K	5%	1/10W
R503	1-216-097-00	RES, CHIP	100K	5%	1/10W
R504	1-216-246-00	RES, CHIP	100K	5%	1/8W
R508	1-216-097-00	RES, CHIP	100K	5%	1/10W
R509	1-216-246-00	RES, CHIP	100K	5%	1/8W
R511	1-216-097-00	RES, CHIP	100K	5%	1/10W
R512	1-216-049-11	RES, CHIP	1K	5%	1/10W
R513	1-216-049-11	RES, CHIP	1K	5%	1/10W
R514	1-216-049-11	RES, CHIP	1K	5%	1/10W
R515	1-216-097-00	RES, CHIP	100K	5%	1/10W
R516	1-216-097-00	RES, CHIP	100K	5%	1/10W
R517	1-216-097-00	RES, CHIP	100K	5%	1/10W
R518	1-216-097-00	RES, CHIP	100K	5%	1/10W
R519	1-216-097-00	RES, CHIP	100K	5%	1/10W
R520	1-216-097-00	RES, CHIP	100K	5%	1/10W
R521	1-216-097-00	RES, CHIP	100K	5%	1/10W
R522	1-216-097-00	RES, CHIP	100K	5%	1/10W
R523	1-216-097-00	RES, CHIP	100K	5%	1/10W
R524	1-216-097-00	RES, CHIP	100K	5%	1/10W
R525	1-216-097-00	RES, CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R526	1-216-097-00	RES, CHIP	100K	5%	1/10W (GREEN)
R527	1-216-097-00	RES, CHIP	100K	5%	1/10W
R529	1-216-097-00	RES, CHIP	100K	5%	1/10W
R530	1-216-097-00	RES, CHIP	100K	5%	1/10W
R531	1-249-429-11	CARBON	10K	5%	1/4W
R533	1-216-097-00	RES, CHIP	100K	5%	1/10W
R534	1-249-417-11	CARBON	1K	5%	1/4W
R535	1-249-417-11	CARBON	1K	5%	1/4W
R536	1-216-097-00	RES, CHIP	100K	5%	1/10W
R537	1-216-113-00	METAL CHIP	470K	5%	1/10W
R538	1-249-413-11	CARBON	470	5%	1/4W
R539	1-249-413-11	CARBON	470	5%	1/4W
R543	1-249-413-11	CARBON	470	5%	1/4W
R544	1-216-097-00	RES, CHIP	100K	5%	1/10W
R545	1-249-413-11	CARBON	470	5%	1/4W
R546	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R547	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R548	1-216-097-00	RES, CHIP	100K	5%	1/10W
R549	1-216-073-00	METAL CHIP	10K	5%	1/10W
R550	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R551	1-216-025-00	RES, CHIP	100	5%	1/10W
R552	1-216-025-00	RES, CHIP	100	5%	1/10W
R553	1-216-097-00	RES, CHIP	100K	5%	1/10W
R554	1-216-295-00	SHORT	0		
R556	1-216-049-11	RES, CHIP	1K	5%	1/10W
R561	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R562	1-249-429-11	CARBON	10K	5%	1/4W
R568	1-216-097-00	RES, CHIP	100K	5%	1/10W
R570	1-216-097-00	RES, CHIP	100K	5%	1/10W (AMBER)
R571	1-216-097-00	RES, CHIP	100K	5%	1/10W
R572	1-216-097-00	RES, CHIP	100K	5%	1/10W
R601	1-249-393-11	CARBON	10	5%	1/4W
R602	1-249-393-11	CARBON	10	5%	1/4W
R603	1-216-186-00	RES, CHIP	330	5%	1/8W
R701	1-216-295-00	SHORT	0		
R702	1-249-401-11	CARBON	47	5%	1/4W
R703	1-216-073-00	METAL CHIP	10K	5%	1/10W
R704	1-216-025-00	RES, CHIP	100	5%	1/10W
R705	1-216-025-00	RES, CHIP	100	5%	1/10W
R711	1-216-097-00	RES, CHIP	100K	5%	1/10W
R712	1-216-089-00	RES, CHIP	47K	5%	1/10W
R713	1-216-089-00	RES, CHIP	47K	5%	1/10W
R714	1-249-421-11	CARBON	2.2K	5%	1/4W
R851	1-216-025-00	RES, CHIP	100	5%	1/10W
R852	1-216-025-00	RES, CHIP	100	5%	1/10W
R853	1-216-041-00	METAL CHIP	470	5%	1/10W
R854	1-216-041-00	METAL CHIP	470	5%	1/10W
R855	1-216-041-00	METAL CHIP	470	5%	1/10W
R856	1-216-041-00	METAL CHIP	470	5%	1/10W
R857	1-216-049-11	RES, CHIP	1K	5%	1/10W
R858	1-216-025-00	RES, CHIP	100	5%	1/10W
		< SWITCH >			
S503	1-692-431-21	SWITCH, TACTILE (RESET)			

Ref. No.	Part No.	Description	Remark
		< TUNER >	
TU1	1-693-373-11	TUNER UNIT	
		< VIBRATOR >	
X501	1-578-785-11	VIBRATOR, CRYSTAL (4.5MHz)	
**********			
		MISCELLANEOUS	
		**********	
15	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S)	(SPEAKER)
16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (REEL/CAPSTAN)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-10	SCREW +B 2X4	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#6	7-624-104-04	STOP RING 2.0, TYPE -E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-067-71	REMOTE COMMANDER (RM-X4S)	
	3-861-731-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
	3-861-731-21	MANUAL, INSTRUCTION (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)	
	3-861-731-31	MANUAL, INSTRUCTION (CZECH, GREEK, POLISH, TURKISH, ENGLISH)	(South European)
	3-861-732-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
	3-861-732-21	MANUAL, INSTRUCTION, INSTALL (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)	
	3-861-732-31	MANUAL, INSTRUCTION, INSTALL (CZECH, GREEK, POLISH, TURKISH, ENGLISH)	(South European)
	3-861-973-11	MANUAL, INSTRUCTION, INSTALL (for RM-X4S) (ENGLISGH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, POLISH, CZECH, GREEK, TURKISH)	
	3-921-278-01	LABEL (DSPL) (for RM-X4S)	
	X-3373-412-1	CASE (PANEL) ASSY (for FRONT PANEL)	
**********			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	3-916-161-31	FRAME ASSY	
502	X-3370-077-1	SCREW ASSY (AE.KEY), FITTING	
503	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
504	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S) (SPEAKER)	
505	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
506	1-775-543-11	CORD, GROUND	
507	X-3373-432-1	BRACKET ASSY (for RM-X4S)	
508	1-465-459-21	ADAPTER, ANTENNA	



98A057542-1
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Published by Quality Assurance Dept.